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September 30, 1982

NIGMS Research Grants

by Grant Number
by Investigator

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Part

1.

September 30, 1982

Research Grants

by Grant Number
by Investigator

Office of Program Analysis
National Institute of General Medical Sciences
National Institutes of Health
Bethesda, Maryland 20205

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FOREWORD

This list of research grants supported by NIGMS replaces the list of September 30, 1981. It provides information on 2,879 awards with a total value of $296,649,364 which were "active" on September 30, 1982. These awards include projects for which the budget period has been extended from a prior year without the award of new funds.

Although these lists provide data as of September 30, changes in the lists, such as the extension of an award beyond September 30, 1982, and additions or terminations of awards effective as of that date but processed subsequent to tabulation of these reports, do occur. However, the frequency of such changes is small, and the need for timely publication far outweighs this small loss in completeness.

Grants are coded to the level of detail which the full 5-digit program area code permits, and the list which begins on page vii gives all program areas, whether or not they are in use at this time.

Thomas L. Mitchell
Chief, Data Management Systems Unit
Financial & Data Management Section
Office of Administrative Management
National Institute of General Medical Sciences

SPECIAL NOTES

Funds. The dollar amounts indicated for each grant represent the amount available for expenditure during the current grant year, not the original commitment or the amount encumbered. Commitments may be reduced by unexpended balances from the previous year, by negotiation, or by both. The use of the "amount available" was introduced in the December 31, 1967 listings.

Supplements. Supplemental awards are listed separately and the amount of the supplement is not included in the amount shown for the base grant. Supplements are indicated by an "S1" or "S2" (meaning first or second supplement) after the grant year. They appear either immediately preceding or immediately following the base grant. If a grant shows a base year and an "S2," the "S1" was either disapproved or withdrawn.

Initial Review Group. In the past few years a number of IRG's have been subdivided or reorganized. The IRG designations attached to specific grants, however, have not kept pace with these changes. The Index of Initial Review Groups, which begins on page xiv of each volume, indicates the combination of IRG's. This index is intended as a page reference for Table 3, but also serves as a glossary of IRG symbols.

Grant Year. A recent change in grant policy permits, in special cases, the extension of the terminal year of a grant period concurrent with the award of the first year of the new grant period. This means that it is now possible for two different grant years of the same grant to be active simultaneously.

Asterisks have been used to identify various items, as follows:

* - Centers, all tables

** - Institution totals in Table 5

*** - IRG totals in Table 3
- Program area totals in Table 4
- State totals in Table 5

**** - Grand total for the entire grant program, whenever it occurs.

EXPLANATORY NOTES - TABLE HEADINGS

DEPARTMENT. Department title in Table 5 is given as it appears on the award statement.

DIR. COSTS & TOTAL DOLLARS. Dollars available for expenditure in terms of direct costs and total dollars. Indirect costs may be obtained by subtraction.

END or END DATE. To save space, only the month and year in which the budget period is expected to terminate are indicated.

F-YRS. The number of additional or future years of support committed, as indicated on the award statement. For some grants for which no future support is indicated in these tables, new awards, in fact, may have been approved at an advisory council meeting subsequent to the issuance of the last award statement.

FY. The latest fiscal year from which an award was paid.

GRANT NO. The 5-digit number identifying the grant.

GRANT YR. The year of the award. In some cases, two years of a grant are active during the same period. This happens when the last year of a project period is extended to allow the investigator to take care of outstanding obligations and at the same time to go on with the current year's research.

GRANT T or TYPE. Type of application. The application type is identified by the standard numerical code used for this purpose; i.e., Type 1 is a competing new application, Type 2 is a competing renewal, Type 3 is a supplement, Type 5 is a non-competing continuation, etc.

INVESTIGATOR. The last name, first name, and middle initial of the investigator are given as they appear on the award statement.

IRG. The Initial Review Group (Study Section) to which the research grant application was assigned is identified by the standard alphabetic abbreviation used by DRG.

PROGRAM AREA. A numeric code is shown under the grant type in Tables 1, 3, and 4 and in a separate column in Tables 2 and 5. This code identifies the NIGMS program area to which the grant has been assigned. A dictionary for the code is given on page vii.

PROJECT TITLE. Space allowed for project titles is limited to 56 characters. On occasion, titles longer than this are received. If they are not edited by the time the lists are produced, the extra characters are cut off by the computer program.

I CELLULAR AND MOLECULAR BASIS OF DISEASE PROGRAM

Cellular Basis of Disease Section

22100 Basic Pathobiology

22200 Cell Regulation, Differentiation, and Growth

22250 Cell Organization, Motility, and Division

22300 Membrane Structure and Function

Molecular Basis of Disease Section

22400 Enzyme Catalysis and Regulation

22410 Glycoconjugates

22450 Bioenergetics

22500 Structural Studies of Proteins and Related Model Systems

22550 Diffraction Analysis of Proteins and Related Model Systems

22600 Theoretical Studies of Proteins and Related Model Systems

II GENETICS PROGRAM

Molecular and Medical Genetics Section

21100 Physical and Organic Chemistry of Nucleic Acids

21200 Replication, Recombination and Repair of DNA

21250 Mechanisms of Mutagenesis

21280 Extrachromosomal Inheritance

21310 Mechanism of Transcription

21320 Mechanism and Control of Translation and Assembly

21400 Human Medical and Behavior Genetics

21480 Cytogenetics and Gene Mapping

Genetics of Growth and Differentiation Section

21600 Chromosome Organiziation and Mechanics

21700 Development Genetics

21750 Control of Gene Expression

21780 Rearrangement of Genetic Elements

21800 Dynamics of Genes in Populations

Genetics Centers

*21910	*21914
*21911	*21915
*21912	*21916
*21913	*21917

*Subclassification is used for assignment to responsible program officer, rather than by subtopic.

III PHARMACOLOGICAL SCIENCES PROGRAM

Pharmacology

*11300 Centers, Program Projects

*11350 Drug Delivery, Absorption, Distribution, and Elimination

*11380 Modifiers of Drug Action

*11700 Centers, Program Projects

*11750 Drug Delivery, Absorption, Distribution, and Elimination

*11760 Drug Metabolism

*11770 Molecular Basis of Drug Action

*11780 Modifiers of Drug Action

*11790 Drug Toxicity, Including Venom Studies

*11810 Chemistry of Natural Materials

*11820 Chemical Processes of Biomedical Significance

*11830 Relations Between Chemical Structure and Biological Activity

*11840 Development and Application of Chemical Methodology and Instrumentation Applicable to Compounds of Biochemical Interest

*11850 Drug Delivery, Absorption, Distribution, and Elimination

*11860 Drug Metabolism

*11870 Molecular Basis of Drug Action

*11880 Modifiers of Drug Action

*11890 Drug Toxicity, Including Venom Studies

*The middle digit is used to indicate assignment to responsible program officer. The fourth digit represents the principal research area. All fifth digits are coded zero at this time.

III PHARMACOLOGICAL SCIENCES PROGRAM (Continued)

Biorelated Chemical Processes

*11900 Program Projects

*11910 Chemistry of Natural Materials

*11920 Chemical Processes of Biomedical Significance

*11930 Relations between Chemical Structure and Biological Activity

*11940 Development and Application of Chemical Methodology and Instrumentation Applicable to Compounds of Biochemical Interest

*The middle digit is used to indicate assignment to responsible program officer. The fourth digit represents the principal research area. All fifth digits are coded zero at this time.

IV PHYSIOLOGY AND BIOMEDICAL ENGINEERING PROGRAM

Biomedical Engineering and Instrument Development Section

12100 Mathematical Methods

12200 Physiological Systems Analysis

12300 Biomaterials

12320 Mechanical and Physico-chemical Properties of Tissues

12350 Prosthetics

12400 Physiological Instrumentation

12500 Biomedical Information Processing

12820 Analytical and Separation Techniques

12840 Spectroscopic Techniques

12900 Shared Instrumentation

12910 Ultrasonic Imaging and Effects

12920 Electromagnetic Imagine and Effects

12930 Microscopy and Microanalysis

12990 Cellular Instrumentation

IV PHYSIOLOGY AND BIOMEDICAL ENGINEERING PROGRAM (Continued)

Physiological Sciences Section

13100	Anesthesiology Program Projects
13100C*	Anesthesiology Centers
13200	Anesthesiology
13250	Anesthesiology New Investigator
13300	Trauma and Burns Program Projects
13300C*	Trauma and Burns Centers
13410	Trauma and Burns - Physiology
13420	Trauma and Burns - Biochemistry
13450	Trauma and Burns - New Investigator
13700	Behavioral Sciences and Adaptation
13900	General Medicine
13901	Epidemiology

*The indicator "C" denotes Research Center (P50).

V MINORITY ACCESS TO RESEARCH CAREERS PROGRAM

29050 MARC Supportive Awards

Index of Initial Review Groups (Study Sections), Table 3

Abbreviation	IRG
AFY	Applied Physiology and Orthopedics
ALY	Allergy and Immunology
BBCA	Molecular and Cellular Biophysics
BBCB	Biophysical Chemistry
BCE	Biochemical Endocrinology
BIO	Biochemistry
BM	Bacteriology and Mycology
BMT	Metallobiochemistry
BNP	Bio-organic and Natural Products Chemistry
BPNB	Basic Psychopharmacology and Neuropsychology Research Rev Comm
BPO	Bio-Psychology
CBY	Cell Biology
CMBD	Cellular & Molecular Basis of Disease
CP	Cellular Physiology Review Group
CPA	Chemical Pathology
CTY	Molecular Cytology
CVB	Cardiovascular and Renal
DABR	Drug Abuse Biomedical Research Review Committee
EDC	Epidemiology and Disease Control
EH	Blood Research Review Group
EI	Experimental Immunology
END	Endocrinology
ET	Experimental Therapeutics
EVR	Experimental Virology
EXP	Experimental Psychology
GBD	Genetic Basis of Disease Review Committee
GEN	Genetics
GMA	General Medicine A
GMB	General Medicine B
HED	Human Embryology and Development
HEM	Hematology
IMB	Immunobiology
IMS	Immunological Sciences
MBC	Microbial Physiology
MBY	Molecular Biology
MCHA	Medicinal Chemistry A
MCHB	Medicinal Chemistry B
MET	Metabolism
MG	Microbial Genetics Review Group
MGN	Mammalian Genetics
NEUA	Neurology A
NEUB	Neurology B
NLS	Neurological Sciences
NSS	No Initial Review Group

Index of Initial REview Groups (Study Sections), Table 3 - Continued

Abbreviation	IRG
NTN	Nutrition
ORTH	Orthopedic Musculoskeletal Study Section
PB	Physical Biochemistry
PBC	Pathobiological Chemistry
PC	Physiological Chemistry
PHRA	Pharmacology
PHY	Physiology
PTHA	Pathology A
PTHB	Pathology B
PTR	Pharmacological Sciences Review Committee
RAD	Radiation
REB	Reproductive Biology
RNM	Diagnostic Radiology
SAT	Surgery, Anesthesiology and Trauma
SB	Surgery and Bioengineering
SGYA	Surgery A
SGYB	Surgery B
SRC	Special Review Committee
SSS	Special Study Section
TMP	Tropical Medicine and Parasitology
TOX	Toxicology
VID	Visual Disorders Review Group
VR	Virology

Index of Initial Review Groups (Study Sections), Table 3

IRG	Abbreviation
Allergy and Immunology	ALY
Applied Physiology and Orthopedics	AFY
Bacteriology and Mycology	BM
Basic Psychopharmacology and Neuropsychology Research Rev Comm	BNPB
Biochemical Endocrinology	BCE
Biochemistry	BIO
Bio-organic and Natural Products Chemistry	BNP
Biphysical Chemistry	BBCB
Bio-Psychology	BPO
Blood Research Review Group	EH
Cardiovascular and Renal	CVB
Cell Biology	CBY
Cellular and Molecular Basis of Disease	CMBD
Cellular Physiology Review Group	CP
Chemical Pathology	CPA
Diagnostic Radiology	RNM
Drug Abuse Biomedical Research Review Committee	DABR
Endocrinology	END
Epidemiology and Disease Control	EDC
Experimental Immunology	EI
Experimental Psychology	EXP
Experimental Therapeutics	ET
Experimental Virology	EVR
General Medicine A	GMA
General Medicine B	GMB
Genetic Basis of Disease Review Committee	GBD
Genetics	GEN
Hematology	HEM
Human Embryology and Development	HED
Immunobiology	IMB
Immunological Sciences	IMS
Mammalian Genetics	MGN
Medicinal Chemistry A	MCHA
Medicinal Chemistry B	MCHB
Metabolism	MET
Metallobiochemistry	BMT
Microbial Genetics Review Group	MG
Microbial Physiology	MBC
Molecular and Cellular Biophysics	BBCA
Molecular Biology	MBY
Molecular Cytology	CTY
Neurological Sciences	NLS
Neurology A	NEUA
Neurology B	NEUB
No Initial Review Group	NSS

Index of Initial Review Groups (Study Sections), Table 3 - Continued

IRG	Abbreviation
Nutrition	NTN
Orthopedic Musculoskeletal Study Section	ORTH
Pathobiological Chemistry	PBC
Pathology A	PTHA
Pathology B	PTHB
Pharmacology	PHRA
Pharmacological Sciences Review Committee	PTR
Physical Biochemistry	PB
Physiological Chemistry	PC
Physiology	PHY
Radiation	RAD
Reproductive Biology	REB
Surgery, Anesthesiology and Trauma	SAT
Surgery and Bioengineering	SB
Special Review Committee	SRC
Special Study Section	SSS
Surgery A	SGYA
Surgery B	SGYB
Toxicology	TOX
Tropical Medicine and Parasitology	TMP
Virology	VR
Visual Disorders Review Group	VID

TABLE-1 RESEARCH GRANTS ACTIVE AS OF 09-30-82 BY GRANT NUMBER

T	GRANT NUMBER / PROGRAM (FINE CODE)	INVESTIGATOR / PROJECT TITLE	GRANTEE INSTITUTION	CITY	STATE	FY	END-DATE	FUT-YRS AVAILABLE	IRG	SUB
							DIRECT		DOLLARS	TOTAL
1	R13 GM00041-01 JF 22500	MEISTER, ALTON TWELFTH INTERNATIONAL CONGRESS OF BIOCHEMISTRY	AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS	BETHESDA	MARYLAND	82	12-82 2,000	0	NSS	2,000
2	R01 GM00091-37 22400	RAJAGOPALAN, K V STRUCTURE AND FUNCTION OF ENZYMES--ROLE OF METALS	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	05-83 164,164	4	PC	231,246
1	R13 GM01611-01 JF 22500	JARDETZKY, OLEG CONFERENCE ON MAGNETIC RESONANCE	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	07-83 3,000	0	SRC	3,000
1	R13 GM01628-01 JF 21600	GOAD, WALTER B WORKSHOP ON COMPUTATIONAL ANALYSIS OF DNA SEQUENCES	ASPEN CENTER FOR PHYSICS	ASPEN	COLORADO	82	07-83 3,000	0	SRC	3,000
2	R01 GM02907-31 11910	LI, CHOH H ACTH AND RELATED PEPTIDES	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	02-83 119,852	4	BCE	157,006
5	R01 GM03545-27 22300	HUF, ERNST G METABOLISM AND ACTIVE ION TRANSPORT IN SKIN	VIRGINIA COMMONWEALTH UNIVERSITY	RICHMOND	VIRGINIA	82	06-83 10,968	0	PHY	16,792
5	R01 GM04712-25 11920	WESTHEIMER, FRANK H MECHANISM OF ENZYME ACTION	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	81	11-83 49,992	0	PC	73,508
3	R01 GM04712-25S1 11920	WESTHEIMER, FRANK H MECHANISM OF ENZYME ACTION	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	81	11-83 26,000	0	PC	38,740
5	R01 GM04725-26 22500	STURTEVANT, JULIAN M PHYSICOCHEMICAL STUDIES OF BIOCHEMICAL REACTIONS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	11-82 61,030	0	BBCB	93,817
2	R01 GM04738-26A1 21600	RIS, HANS SUBMICROSCOPIC ORGANIZATION OF CHROMOSOMES	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	06-83 55,960	1	MBY	80,023
5	R01 GM04842-27 22300	HESS, GEORGE P RELATIONSHIPS BETWEEN PROTEIN STRUCTURE AND FUNCTION	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK		08-83 53,829	0	BIO	76,414
5	R01 GM05147-26 11910	STORK, GILBERT SYNTHESIS OF BIOLOGICALLY ACTIVE NATURAL PRODUCTS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	08-83 129,215	2	MCHA	219,278

TABLE-1 RESEARCH GRANTS ACTIVE AS OF 09-30-82 BY GRANT NUMBER

T	GRANT NUMBER / PROGRAM (FINE CODE)	INVESTIGATOR / PROJECT TITLE	GRANTEE INSTITUTION	CITY	STATE	FY	END-DATE	FUT-YRS AVAILABLE	IRG	SUB	DOLLARS DIRECT	DOLLARS TOTAL
2	R01 GM05301-25 11920	CONN, ERIC E METABOLISM OF AROMATIC COMPOUNDS	UNIVERSITY OF CALIFORNIA	DAVIS DAVIS	CALIFORNIA	82	02-83	4	PC		76,903	96,558
5	R01 GM05472-24 12840	BIEMANN, KLAUS MASS SPECTROMETRIC SEQUENCING OF PROTEINS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	12-82	3	SSS		144,724	199,276
5	R01 GM05810-23 22300	ABRAMS, ADOLPH STRUCTURE AND FUNCTION OF BACTERIAL MEMBRANE ATPASE	UNIVERSITY OF COLORADO HLTH SCIENCES CTR	DENVER	COLORADO	82	04-83	0	BIO		61,635	76,736
5	R01 GM05811-22 11920	MORAWETZ, HERBERT SYNTHETIC POLYMER STUDIES RELATED TO BIOLOGY	POLYTECHNIC INSTITUTE OF NEW YORK	NEW YORK	NEW YORK	82	06-83	0	BBCB		48,482	75,328
5	R01 GM05829-24 11910	LEONARD, NELSON J NUCLEOSIDES, NUCLEIC ACIDS, AND CELL DIVISION FACTORS	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	11-82	2	MCHA		112,384	158,763
5	R01 GM05919-24 22450	LEHNINGER, ALBERT L ENERGY-COUPLING PROCESSES IN MITOCHONDRIA	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	02-83	1	BIO		176,462	262,993
5	R01 GM06048-24 21750	MAAS, WERNER K REGULATION OF ENZYME SYNTHESIS IN BACTERIA	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82	12-82	1	MBC		73,110	109,299
5	R01 GM06168-23 11940	SCHUERCH, CONRAD STEREOSPECIFIC SYNTHESIS OF POLYSACCHARIDES	COLLEGE OF ENVIRONMENTAL SCI & FORESTRY	SYRACUSE	NEW YORK	82	06-83	0	MCHA		47,000	69,649
5	R01 GM06196-24 21200	LEHMAN, I ROBERT DNA REPLICATION IN PRO- AND EUKARYOTES	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	08-83	1	PC		156,038	256,607
5	R01 GM06304-19 11910	NICKON, ALEX DOMED FUNCTIONAL GROUPS	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	81	08-83	0	MCHA		68,866	102,524
5	R01 GM06590-24 22400	REED, LESTER J BIOCHEMISTRY OF ALPHA-KETO ACID DEHYDROGENASE COMPLEXES	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	07-83	2	BIO		104,587	141,192
2	R01 GM06840-24 11910	DJERASSI, CARL MARINE CHEMISTRY WITH SPECIAL EMPHASIS ON STEROIDS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	04-83	4	BNP		195,682	300,478

T	GRANT NUMBER / PROGRAM (FINE CODE)	INVESTIGATOR / PROJECT TITLE	GRANTEE INSTITUTION	CITY	STATE	FY	END-DATE	FUT-YRS AVAILABLE	IRG SUB	DOLLARS DIRECT	DOLLARS TOTAL
5	R01 GM06920-24 22550	LIPSCOMB, WILLIAM H STRUCTURE & FUNCTION OF BIOLOGICALLY ACTIVE MOLECULES	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	08-83	2	BBCA	224,830	331,102
5	P01 GM06965-23 22300	REVEL, JEAN-PAUL MOLECULAR BASIS OF SPECIFICITY IN CELLULAR MEMBRANES	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	02-83	1	SSS	385,588	563,336
3	P01 GM06965-23S1 22300	REVEL, JEAN P MOLECULAR BASIS OF SPECIFICITY IN CELLULAR MEMBRANES	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	02-83	1	SSS	97,190	142,305
5	R01 GM06983-23 21250	DE MARS, ROBERT I GENETIC STUDIES WITH CULTIVATED MAMMALIAN CELLS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	04-83	0	MGN	117,682	165,588
5	R01 GM07261-22 22400	LOWENSTEIN, JOHN M ENZYMATIC & CHEMICAL REACTIONS OF ADENOSINE TRIPHOSPHATE	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	12-82	1	PC	64,575	103,636
2	R01 GM07446-24 21750	MAGASANIK, BORIS REGULATION AND FUNCTION OF GLUTAMINE SYNTHETASE	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	08-83	4	MBC	104,000	145,272
5	R01 GM07487-22 11930	ZIMMERMAN, HOWARD E PHOTOCHEMISTRY OF ORGANIC MOLECULES	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	07-83	1	MCHA	87,446	123,113
5	R01 GM07495-20 13700	MC GILL, THOMAS E THE GENETICS AND PHYSIOLOGY OF BEHAVIORAL DIFFERENCES	WILLIAMS COLLEGE	WILLIAMSTOWN	MASSACHUSETTS	81	02-83	0	EXP	52,182	78,763
5	R01 GM07581-22 21200	KORNBERG, ARTHUR MECHANISM AND CONTROL OF DNA REPLICATION	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	08-83	0	BIO	225,851	374,585
5	R01 GM07768-23 22400	HAGER, LOWELL P ENZYMATIC ACTIVATION MECHANISMS	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	08-83	0	BIO	82,410	116,504
2	R01 GM07779-20 21700	HANNEY, DAVID L GENETIC STUDIES WITH TETRAHYMENA	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	02-83	4	GEN	106,845	151,087
5	R01 GM07816-23 21250	STRAUSS, BERNARD S STUDY MODE OF ACTION OF CHEMICAL MUTAGENS	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	11-82	1	GEN	81,616	126,997

TABLE-1 RESEARCH GRANTS ACTIVE AS OF 09-30-82 BY GRANT NUMBER

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5	R01 GM07874-20 11950	WASSERMAN, HARRY H SYNTHESIS OF B-LACTUM ANTIBIOTICS AND MACROCYCLIC LACTA	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	06-83	2	MCHA		53,600	90,048
5	R01 GM07884-21 22400	PARK, JANE H GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	03-83	2	BIO		64,285	97,685
5	R01 GM08209-18 12910	NYBORG, WESLEY L BIOPHYSICAL BASIS FOR THRESHOLDS IN BIO-ULTRASOUND	UNIVERSITY OF VERMONT & ST AGRIC COLLEGE	BURLINGTON	VERMONT	82	06-83	0	RHM		106,704	157,396
5	R01 GM08229-22 22200	VOLCANI, BENJAMIN E BIOCHEMICAL STUDIES OF SILICEOUS SKELETAL FORMATION	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	04-83	1	GMB		119,515	156,255
5	R01 GM08347-22 11920	SPENCE, JACK T THE FUNCTION OF MOLYBDENUM IN BIOLOGICAL SYSTEMS	UTAH STATE UNIVERSITY	LOGAN	UTAH	82	04-83	1	BMT		42,700	57,645
5	R01 GM08521-22 12840	GRANT, DAVID M CARBON-13 MAGNETIC RESONANCE--METHODS AND THEORY	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	05-83	0	BBCB		77,850	111,758
2	R01 GM08710-22 22500	DAYHOFF, MARGARET O COMPUTER STUDY OF SEQUENCES OF AMINO ACIDS IN PROTEINS	NATIONAL BIOMEDICAL RESEARCH FOUNDATION	WASHINGTON	DIST OF COL	82	07-83	1	SSS		260,346	364,472
5	R01 GM08822-20 22400	OLSON, JAMES MECHANISM OF AMYLASE ACTION	IOWA STATE UNIVERSITY OF SCIENCE & TECH	AMES	IOWA	81	03-83	0	PC		71,253	87,259
5	R01 GM08893-19 22500	KUSTIN, KENNETH CHEMICAL KINETICS STUDIED BY RELAXATION SPECTROMETRY	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	03-83	1	BMT		39,960	64,735
5	R01 GM08963-20 22400	RAY, WILLIAM J, JR MECHANISM OF THE GROUP TRANSFER PROCESS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	11-82	1	PB		95,661	141,255
5	R01 GM08995-21 21750	METZENBERG, ROBERT L, JR THE GENETIC CONTROL OF PROTEIN SYNTHESIS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	12-82	1	GEN		59,405	83,518
5	R01 GM09042-20 21320	HOROWITZ, JACK STRUCTURAL BASIS OF RIBONUCLEIC ACID SPECIFICITY	IOWA STATE UNIVERSITY OF SCIENCE & TECH	AMES	IOWA	82	11-82	1	PC		54,270	72,722

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5	R01 GM09293-20 22400	KIRKWOOD, SAMUEL USE OF ENZYMES IN STRUCTURAL CARBOHYDRATE CHEMISTRY	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	03-83	2	BIO	45,415	61,764
2	R01 GM09541-21 21750	GILBERT, WALTER ROLE OF RIBONUCLEIC ACID IN PROTEIN SYNTHESIS	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	07-83	1	GEN	232,291	357,728
5	R01 GM09587-21 22400	GRAVES, DONALD J INTERCONVERSION & REGULATION OF GLYCOGEN METABOLISM	IOWA STATE UNIVERSITY OF SCIENCE & TECH	AMES	IOWA	82	12-82	2	BIO	69,775	85,955
2	R01 GM09686-21 11910	BUCHI, GEORGE H THE CHEMISTRY OF NATURAL PRODUCTS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	03-83	4	BNP	160,290	235,634
2	R01 GM09706-17 11440	CARPINO, LOUIS A NEW AMINO-PROTECTING GROUPS	UNIVERSITY OF MASSACHUSETTS AMHERST	AMHERST	MASSACHUSETTS	82	08-83	4	MCHA	92,664	118,098
5	R01 GM09738-20 21750	YANOFSKY, CHARLES GENETIC/BIOCHEMICAL STUDY OF TRYPTOPHAN SYNTHETASE	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	04-83	1	MBC	98,050	150,304
5	R01 GM09886-21 21700	CHOVNICK, ARTHUR GENETIC STUDIES IN DROSOPHILA MELANOGASTER	UNIVERSITY OF CONNECTICUT STORRS	STORRS	CONNECTICUT	82	03-83	1	GEN	142,608	218,909
5	R01 GM09901-21 21250	HANAWALT, PHILIP C REPLICATION AND REPAIR OF GENETIC MATERIAL	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	3	RAD	99,839	157,746
5	R01 GM09933-20 12910	CARSTENSEN, EDWIN L INTERACTION OF ULTRASOUND WITH BIOLOGICAL MATERIAL	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	04-83	2	RHM	70,540	119,780
2	R01 GM09965-19 21700	SANDLER, LAURENCE M CYTOGENETICS OF MEIOSIS AND DEVELOPMENT IN DROSOPHILA	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	11-82	4	GEN	50,501	67,621
5	R01 GM09966-21 21480	RUDDLE, FRANK H GENETIC ANALYSIS OF SOMATIC CELL POPULATIONS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	08-83	2	MGN	336,861	563,886
5	R01 GM10040-20 11920	BUSCH, DARYLE H BIOMIMETIC METAL COMPLEXES OF MACROCYLIC LIGANDS	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	82	06-83	0	BMT	80,292	110,000

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5	R01 GM10138-20 22200	GREGG, JAMES H CELL. SLIME MOLD INTERACTION/REGULATION/DIFFERENTIATION	UNIVERSITY OF FLORIDA	GAINESVILLE	FLORIDA	82	12-82	0	CBY		49,250	71,117
2	R01 GM10265-20 11930	LETSINGER, ROBERT L SYNTHETIC POLYNUCLEOTIDES AS SITE SPECIFIC REAGENTS	NORTHWESTERN UNIVERSITY	EVANSTON	ILLINOIS	82	06-83	3	BNP		81,754	110,693
3	R01 GM10265-20S1 11930	LETSINGER, ROBERT L NIGMS SHARED INSTRUMENTATION GRANT	NORTHWESTERN UNIVERSITY	EVANSTON	ILLINOIS	82	06-83	2	SSS		65,485	65,937
5	R01 GM10287-20 22400	FRIDOVICH, IRWIN BIOLOGY OF SUPEROXIDE RADICAL & SUPEROXIDE DISMUTASES	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	08-83	1	BIO		118,664	177,996
5	R01 GM10317-18 21750	GREENE, RONALD C BIOCHEMISTRY OF SULFONIUM COMPOUNDS	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	80	08-83	0	PC		41,477	50,187
5	R01 GM10356-19 21400	AMOS, D BERNARD THE IMMUNOGENETICS OF MAN, MICE & VIRUSES	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	11-82	2	IMB		296,180	439,870
5	R01 GM10374-20 22410	SCHMID, KARL CHEMISTRY OF HUMAN PROTEINS AND GLYCOPROTEINS	BOSTON UNIVERSITY	BOSTON	MASSACHUSETTS	82	11-82	0	PC		100,783	153,176
5	R01 GM10390-19 21750	FURTH, JOHN J RNA METABOLISM IN MAMMALIAN CELLS	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	07-83	0	PC		72,346	117,853
5	R01 GM10421-18 11910	VAN TAMELEN, EUGENE E BIOORGANIC CHEMISTRY OF STEROIDS AND TERPENOIDS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	07-83	0	MCHA		40,148	63,434
5	R01 GM10422-20 12930	SALPETER, MIRIAM M HIGH RESOLUTION AUTORADIOGRAPHY	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	11-82	1	CBY		84,520	132,884
5	R01 GM10451-18 22400	BERNHARD, SIDNEY A KINETIC ANALYSIS OF ENZYME CATALYSIS	UNIVERSITY OF OREGON	EUGENE	OREGON	82	06-83	3	BIO		66,471	94,682
5	R01 GM10452-19 21400	KARLIN, SAMUEL STOCHASTIC MODELS IN MEDICINE AND BIOLOGY	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	12-82	1	SSS		109,461	172,948

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5 R01 GM10499-18 21600	GAY, HELEN CHROMOSOME STRUCTURE IN RELATION TO GENE ACTION	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	80	06-83	0	GEN	39,449	62,329
5 R01 GM10704-20 22550	ROSSMANN, MICHAEL G STRUCTURAL STUDIES OF PROTEIN SUBUNITS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	05-83	0	BBCB	103,955	145,537
5 R01 GM10791-20 21320	KELLER, ELIZABETH B THE BIOSYNTHESIS OF RNA'S: MECHANISMS AND CONTROLS	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	06-83	3	PC	91,851	126,218
2 R01 GM10828-27 22550	JENSEN, LYLE H STRUCTURE OF BIOLOGICALLY IMPORTANT COMPOUNDS	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	03-83	2	BBCA	76,870	97,047
5 R01 GM10831-24 22500	LASKOWSKI, MICHAEL, JR PROTEIN PROTEINASE INHIBITORS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	08-83	3	PC	189,117	259,889
5 R01 GM10840-24 21100	TINOCO, IGNACIO, JR STRUCTURE AND FUNCTION OF NUCLEIC ACIDS	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	11-82	2	BBCA	125,533	164,448
5 R01 GM10848-26 22500	GOLDSTEIN, JACOB H NMR SPECTROSCOPY OF BIOLOGICALLY IMPORTANT SYSTEMS	EMORY UNIVERSITY	ATLANTA	GEORGIA	82	08-83	3	BBCB	71,814	106,721
2 R01 GM10851-25 12820	GIDDINGS, J CALVIN BIOMEDICAL SEPARATIONS: FIELD-FLOW FRACTIONATION	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	01-83	4	BMT	89,069	127,587
5 R01 GM10865-23 22600	ALBRECHT, ANDREAS C BASIC PHOTOELECTRIC STUDIES IN ORGANIC CONDENSED PHASE	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	06-83	3	BBCA	84,950	128,406
5 R01 GM10880-23 22500	YANG, JEN T OPTICAL ROTATORY POWER OF BIOPOLYMERS	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	04-83	1	BBCA	78,600	102,687
2 R01 GM10928-20 22550	KRAUT, JOSEPH CRYSTALLOGRAPHIC STUDY OF BIOLOGICAL MOLECULES	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	12-82	4	BBCB	109,250	142,270
5 R01 GM10937-20 11940	BROWN, HERBERT C STEREOSPECIFIC SYNTHESES VIA HYDROBORATION	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	06-83	3	MCHA	83,443	116,820

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2	R01 GM10991-23 21600	DAVIDSON, NORMAN R PHYSICIAL CHEMISTRY OF NUCLEIC ACIDS	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	05-83	3	CTY		211,358	310,650
5	R01 GM10999-18 21750	LINGREL, JERRY B REGULATION OF GENE EXPRESSION IN MAMMALIAN CELLS	UNIVERSITY OF CINCINNATI	CINCINNATI	OHIO	82	06-83	3	BIO		84,244	116,422
5	R01 GM11014-22 21250	HOWARD-FLANDERS, PAUL CROSSLINKING OF NUCLEOFROTEINS BY RADIATION	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	11-82	3	RAD		68,545	105,604
5	R01 GM11024-19 22300	OXENDER, DALE L MEMBRANE TRANSPORT COMPONENTS IN BACTERIA	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	07-83	2	SSS		73,547	115,624
5	R01 GM11040-18 22400	BRIGHT, HAROLD J MECHANISM OF ENZYME ACTION	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	03-83	0	PC		92,555	152,716
5	R01 GM11071-20 22500	BRANDTS, JOHN F FREE ENERGY OF FOLDING OF GLOBULAR PROTEINS	UNIVERSITY OF MASSACHUSETTS AMHERST	AMHERST	MASSACHUSETTS	82	06-83	0	BBCB		60,395	86,898
5	R01 GM11094-20 22450	BOYER, PAUL D BIOLOGICAL ENERGY TRANSDUCING MECHANISMS	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	04-83	2	BIO		104,008	135,320
5	R01 GM11105-20 22400	FRANK, LEONARD METABOLISM OF CERTAIN AMINO ACIDS	UNIVERSITY OF MARYLAND AT BALTIMORE	BALTIMORE	MARYLAND	82	05-83	0	BIO		89,028	135,323
5	R01 GM11106-20 22400	MASSEY, VINCENT BIOLOGICAL OXIDATION MECHANISMS	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	08-83	0	BIO		149,578	236,333
5	R01 GM11180-19 21100	HEARST, JOHN E STRUCTURE-FUNCTION RELATIONSHIPS OF NUCLEIC ACIDS	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	06-83	1	BBCB		127,566	181,016
5	R01 GM11223-20 22500	WEBER, GREGORIO PROTEIN CONFIGURATION BY FLUORESCENCE TECHNIQUES	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	04-83	0	BBCA		125,980	178,633
5	P01 GM11301-20 21700	SHAPIRO, LUCILLE GENETIC CONTROL OF CELL GROWTH AND DEVELOPMENT	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	05-83	2	SSS		468,023	867,943

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5	R01 GM11373-20 12840	WINEFORDNER, JAMES D MOLECULAR SPECTROMETRIC METHODS	UNIVERSITY OF FLORIDA FOR DRUGS	GAINESVILLE	FLORIDA	82	08-83	3	SSS		119,908	169,215
5	R01 GM11494-18 22300	WILLIS, JOHN S ION TRANSPORT IN CELLS OF HIBERNATING MAMMALS	UNIVERSITY OF ILLINOIS	URBANA-CHAMPAIGN URBANA	ILLINOIS	82	11-82	0	PHY		63,722	90,740
5	R01 GM11518-18 21100	GILHAM, PETER T FINE STRUCTURE OF NUCLEIC ACIDS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	06-83	1	BIO		50,163	68,917
5	P01 GM11546-19 21800	COCKERHAM, C CLARK QUANTITATIVE GENETICS RESEARCH PROGRAM	NORTH CAROLINA STATE UNIVERSITY	RALEIGH RALEIGH	NORTH CAROLINA	82	11-82	3	SSS		296,199	413,879
5	R01 GM11598-18 11770	GOSSELIN, ROBERT E DRUG EFFECTS ON SOLUTE TRANSPORT ACROSS EPITHELIA	DARTMOUTH COLLEGE	HANOVER	NEW HAMPSHIRE	82	05-83	0	PHRA		34,978	52,222
2	R01 GM11632-20 22300	BRAND, LUDWIG FLUORESCENCE PROBES IN STUDIES OF PROTEINS AND MEMBRANES	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	08-83	4	BBCA		121,070	171,380
5	R01 GM11726-19 21280	ATTARDI, GIUSEPPE GENE EXPRESSION AND CONTENT IN CELL DIFFERENTIATION	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	12-82	1	GEN		240,278	354,171
5	R01 GM11741-16 22450	LOACH, PAUL A STRUCTURE AND FUNCTION OF PHOTOSYNTHETIC MEMBRANES	NORTHWESTERN UNIVERSITY	EVANSTON	ILLINOIS	82	06-83	1	PB		80,750	105,849
5	R01 GM11762-17 22500	STARZAK, MICHAEL E THE EFFECTS OF SALTS ON INTERACTIONS IN AQUEOUS MEDIA	STATE UNIVERSITY NEW YORK BINGHAMTON	BINGHAMTON	NEW YORK	81	12-82	0	BBCB		35,507	51,733
5	R01 GM11895-19 21750	HALL, BENJAMIN D EXPRESSION AND REGULATION OF CYTOCHROME C GENES	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	04-83	2	GEN		100,237	133,539
5	R01 GM11899-19 21750	MC FALL, ELIZABETH STUDIES ON CONTROL MECHANISMS IN ENZYME BIOSYNTHESIS	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82	12-82	2	GEN		76,485	114,031
2	R01 GM11916-19 21100	ZIMM, BRUNO H NUCLEIC ACIDS AND CHROMOSOMAL DNA	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	12-82	4	BBCA		99,326	127,668

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5	R01 GM11973-17 11760	FRYDMAN, BENJAMIN J BIOSYNTHETIC INTERMEDIATES OF PORPHYRINS	UNIVERSITY OF BUENOS AIRES	BUENOS AIRES	ARGENTINA	82	08-83	1	BMT		14,900	14,900
5	R01 GM11976-17 11910	HORTON, DEREK SYNTHESIS OF BIOLOGICALLY IMPORTANT CARBOHYDRATES	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	82	09-83	0	MCHA		80,213	109,522
5	R01 GM11983-19 22400	LIN, EDMUND C GLYCEROL DISSIMILATION AND ITS REGULATION IN BACTERIA	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	04-83	2	MBC		87,634	171,587
2	R01 GM12010-19 21310	CHAMBERLIN, MICHAEL J SELECTIVITY OF BACTERIAL TRANSCRIPTION	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	03-83	4	MG		155,800	195,716
3	R01 GM12010-1951 21310	CHAMBERLIN, MICHAEL J NIGMS SHARED INSTRUMENTATION GRANT	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	03-83	2	SSS		175,090	179,768
5	R01 GM12053-18 21320	KAJI, AKIRA BIOCHEMICAL CONTROL OF MACROMOLECULAR SYNTHESIS	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	12-82	0	PC		44,436	71,598
5	R01 GM12152-18 11920	MARGERUM, DALE W METAL ION TRANSFER AND CATALYSIS IN PEPTIDE COMPLEXES	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	11-82	2	BMT		55,014	75,973
5	R01 GM12159-19 22500	SCHACHMAN, HOWARD K STRUCTURES AND INTERACTIONS OF BIOLOGICAL MACROMOLECULES	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	04-83	1	BBCA		125,600	164,536
5	P01 GM12202-19 22450	WILSON, DAVID F OXIDATIVE PHOSPHORYLATION IN BIOLCGICAL MEMBRANES	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	04-83	0	SSS		308,547	500,653
5	R01 GM12228-19 22450	MAHLER, HENRY R THE BIOSYNTHESIS OF RESPIRATORY ENZYMES	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	82	03-83	1	BIO		110,467	155,288
2	R01 GM12281-19 12910	DUNN, FLOYD ULTRASONIC ABSORPTION BY BIOLOGICAL MATERIALS	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	08-83	4	RHM		68,512	93,745
5	R01 GM12394-19 22450	BEINERT, HELMUT COMPONENTS AND PATHWAYS IN BIOLOGICAL OXIDATIONS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	08-83	1	PB		107,143	151,924

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							DIRECT		DOLLARS	TOTAL
5	R01 GM12427-19 21600	GALL, JOSEPH G THE ORGANIZATION OF ANIMAL CELL NUCLEI	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	08-83 119,450	1	MBY	197,276
5	R01 GM12446-18 22500	COHN, MILDRED NMR AND EPR STUDIES OF ENZYME-NUCLEOTIDE INTERACIONS	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	81	02-83 106,888	0	BBCB	168,695
2	R01 GM12522-18 21750	UMBARGER, H EDWIN ENZYMIC MECHANISMS IN BIOSYNTHETIC PATHWAYS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	11-82 158,607	4	MG	220,069
5	R01 GM12551-18 22400	BURNS, RICHARD O MOLECULAR MECHANISMS OF BIOLOGICAL CONTROL	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	04-83 61,410	2	MBC	92,115
2	R01 GM12573-18 CA 11770	GOLDBERG, IRVING H MOLECULAR PHARMACOLOGY OF ANTICANCER DRUGS	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	12-82 168,759	4	PC	294,984
2	R01 GM12592-18 12840	HOCHSTRASSER, ROBIN M PHOTOPROCESSES IN THE ORGANIC SOLID STATE	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	01-83 115,767	4	BBCA	156,566
5	R01 GM12607-18 21320	KONIGSBERG, WILLIAM H RELATION OF PROTEIN STRUCTURE TO BIOLOGICAL FUNCTION	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	12-82 94,474	2	PC	149,269
5	R01 GM12633-19 22400	ABELES, ROBERT H ENZYME MECHANISMS AND ENZYME INHIBITORS	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	11-82 78,338	0	BIO	126,288
5	R01 GM12640-18 11920	CRAM, DONALD J HOST MOLECULES THAT COMPLEX AND CATALYZE	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	11-82 85,041	2	MCHA	111,404
5	R01 GM12672-12 11910	BURGESS, EDWARD M THE CHEMISTRY OF NEW FUNCTIONAL GROUPS IN ENZYMES	GEORGIA INSTITUTE OF TECHNOLOGY	ATLANTA	GEORGIA	82	02-83 60,100	0	MCHA	93,155
5	P50 GM12675-18 M 11300	TEPHLY, THOMAS R BIOCHEMICAL TOXICOLOGY AND PHARMACOLOGY	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	11-82 539,000	1	PTR	740,020
3	P50 GM12675-18S1 M 11300	TEPHLY, THOMAS R BOCHEMICAL TOXICOLOGY AND PHARMACOLOGY	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	11-82 74,182	1	PTR	102,371

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5	R01 GM12702-18 21750	SHERMAN, FRED GENETIC CONTROL OF CYTOCHROME C IN YEAST	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	12-82	1	GEN		163,194	242,644
5	R01 GM12832-14 11920	RITCHIE, CALVIN D NUCLEOPHILIC REACTIVITY	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	81	12-82	0	BBCA		26,113	37,153
2	R01 GM12848-17 11910	HARRIS, THOMAS M TETRACYCLINES AND RELATED PHENOLIC NATURAL PRODUCTS	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	12-82	3	BHP		57,316	87,463
5	R01 GM12862-17 22500	EYRING, EDWARD M STRUCTURAL STUDIES OF NUCLEOSIDES AND NUCLEOTIDES	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	11-82	0	BBCA		52,230	75,734
5	R01 GM12934-18 21320	HAYASHI, MASAKI SYNTHESIS OF INFECTIOUS BACTERIOPHAGE PARTICLES	UNIVERSITY OF CALIFORNIA SAN DIEGO LA JOLLA		CALIFORNIA	82	04-83	0	PC		70,985	92,680
5	R01 GM12953-32 21700	SRB, ADRIAN M DEVELOPMENTAL GENETIC STUDIES OF NEUROSPORA	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	81	11-82	0	GEN		38,492	55,167
2	R01 GM13017-18 21750	BECKWITH, JONATHAN R REGULATION OF RBS & OTHER CAMP-DEPENDENT GENES IN E COLI	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	08-83	4	MG		63,527	119,189
5	R01 GM13037-17 22400	MEHLER, ALAN H STRUCTURE AND FUNCTION OF AMINOACYL-TRNA SYNTHETASES	MEDICAL COLLEGE OF WISCONSIN	MILWAUKEE	WISCONSIN	82	03-83	1	BIO		78,022	116,533
2	R01 GM13116-17 22400	STUEHR, JOHN E KINETIC INVESTIGATION OF BIOCHEMICAL REACTIONS	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	82	03-83	3	BIO		63,380	94,684
5	R01 GM13191-18 22500	FEHER, GEORGE SPECTROSCOPIC INVESTIGATIONS OF BIOLOGICAL SYSTEMS	UNIVERSITY OF CALIFORNIA SAN DIEGO LA JOLLA		CALIFORNIA	82	06-83	3	BBCA		128,580	169,650
5	R01 GM13215-17 22500	STELLWAGEN, EARLE C STRUCTURE AND FUNCTION STUDIES OF CYTOCHROME C	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	11-83	0	BBCB		36,590	50,494
5	R01 GM13221-18 21200	MOSIG, GISELA DNA REPLICATION AND RECOMBINATION IN BACTERIOPHAGE	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	08-83	0	GEN		93,945	148,537

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5	R01 GM13235-18 21750	BERG, PAUL MECHANISMS AND REGULATION OF GENE EXPRESSION	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	08-83 200,827	2	EVR	333,815
5	R01 GM13246-25 11910	LEETE, EDWARD METABOLISM OF NATURAL PRODUCTS OF MEDICINAL INTEREST	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	12-82 68,602	1	MCHA	93,299
3	R01 GM13246-25S1 11910	LEETE, EDWARD METABOLISM OF NATURAL PRODUCTS OF MEDICINAL INTEREST	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	12-82 27,000	0	BNP	27,000
5	R01 GM13280-19 21320	DOERMANN, AUGUST H INVESTIGATION OF GENETIC PROBLEMS WITH BACTERIOPHAGES	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	12-82 128,583	0	EVR	170,397
5	R01 GM13292-18 22400	HAMMES, GORDON G KINETICS OF PHYSIOLOGICALLY IMPORTANT REACTIONS	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	11-82 140,980	2	BBCA	213,925
5	R01 GM13306-17 11920	BENKOVIC, STEPHEN J PHOSPHATE ACTIVATION MECHANISMS	PENNSYLVANIA STATE UNIVERSITY UNIV PARK	UNIVERSITY PARK	PENNSYLVANIA	82	12-82 123,495	3	BIO	162,450
5	R01 GM13326-15 12820	PARDUE, HARRY L INSTRUMENTATION FOR FAST CLINICAL ANALYSES	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	11-82 68,386	0	BMT	112,151
5	R01 GM13344-17 21200	HURWITZ, JERARD STUDIES OF MACROMOLECULAR ALTERATION AND SYNTHESIS	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	11-82 138,756	3	PC	258,086
3	R01 GM13344-17S1 21200	HURWITZ, JERARD STUDIES ON PROCARYOTIC AND EUCARYOTIC DNA REPLICATION	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	11-82 21,710	1	SSS	40,381
5	R01 GM13366-18 22550	JENSEN, LYLE H CRYSTALLOGRAPHIC STUDY OF PROTEINS	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	07-83 79,230	0	BBCB	105,862
5	R01 GM13401-17 22500	TELLER, DAVID C ASSOCIATION REACTIONS OF ENZYMES	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	12-82 56,620	0	BBCA	75,475
2	R01 GM13435-16A1 21310	ORGEL, LESLIE E EVOLUTION OF GENETIC SPECIFICITY	SALK INSTITUTE FOR BIOLOGICAL STUDIES	LA JOLLA	CALIFORNIA	82	06-83 78,370	2	BNP	118,186

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2	R01 GM13453-17 11440	KEMP, DANIEL S SYNTHESIS AND REACTIONS OF PEPTIDES	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	06-83	4	BNP		140,188	188,504
5	R01 GM13498-17 11920	SPIRO, THOMAS G METAL CENTERS IN BIOLOGICAL SYSTEMS	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	07-83	2	BBCB		67,710	105,924
2	R01 GM13511-17 21320	GOLDBERG, EDWARD B VIRAL-HOST RECOGNITION AND PENETRATION	TUFTS UNIVERSITY	BOSTON	MASSACHUSETTS	82	11-82	4	MBC		92,850	144,447
5	R01 GM13557-16 21250	POWERS, EDWARD L PHYSICO-CHEMICAL STUDIES OF RADIATION EFFECTS IN CELLS	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	03-83	3	RAD		85,332	114,148
5	R01 GM13598-17 11940	TROST, BARRY M MACROLIDES, STEROIDS, PROSTANOIDS, ETC--SYNTHETIC DESIGN	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	05-83	0	MCHA		84,662	118,318
5	R01 GM13626-16 21320	GALLANT, JONATHAN A CONTROL OF CELL GROWTH	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	04-83	1	MBC		66,448	88,126
5	R01 GM13631-17 21250	LEFEVRE, GEORGE, JR COMPARATIVE STUDIES ON INDUCED MUTATION IN DROSOPHILA	CALIFORNIA STATE UNIVERSITY NORTHRIDGE	NORTHRIDGE	CALIFORNIA	82	11-82	0	GEN		78,198	108,695
5	R01 GM13638-17 11920	TAUBE, HENRY BIOCHEMICALLY SIGNIFICANT MOLECULES AS LIGANDS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	03-83	1	BMT		73,364	115,915
5	R01 GM13641-16 22450	SANADI, D RAO OXIDATIVE PHOSPHORYLATION IN HEART MITOCHONDRIA	BOSTON BIOMEDICAL RESEARCH INSTITUTE	BOSTON	MASSACHUSETTS	82	06-83	2	PB		115,913	171,341
5	R01 GM13684-16 22600	APPLEQUIST, JON B THEORY OF MOLECULAR OPTICAL PROPERTIES	IOWA STATE UNIVERSITY OF SCIENCE & TECH	AMES	IOWA	82	08-83	2	BBCA		36,860	49,392
5	R01 GM13745-17 22250	HICKLAS, R BRUCE ANALYSIS AND CONTROL OF CHROMOSOME MOVEMENT	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	12-82	3	CBY		54,119	81,179
5	R01 GM13777-15 22400	KALLEN, ROLAND G BIOCHEMICAL CATALYSIS MECHANISMS--C-C & C-N BONDS	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	11-82	2	BIO		80,847	133,398

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2	R01 GM13854-16 11920	WASSERMAN, HARRY H REACTIONS OF MOLECULAR OXYGEN WITH ORGANIC SUBSTRATES	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	06-83	3	MCHA	76,766	127,607
5	R01 GM13864-17 21600	KUEHL, LEROY R NONHISTONE NUCLEAR PROTEINS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	05-83	1	PC	62,194	90,181
2	R01 GM13901-17 12840	HORNING, EVAN C ANALYTICAL BIOCHEMISTRY FOR HUMAN STUDIES	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	07-83	2	555	276,601	356,557
5	R01 GM13914-18 22500	SCHUMAKER, VERNE N MACROMOLECULES OF CIRCULATORY AND GENETIC IMPORTANCE	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	08-83	3	BBCB	86,430	119,878
2	R01 GM13925-17 22550	BANASZAK, LEONARD J STRUCTURAL STUDIES OF DEHYDROGENASES AND LIPOPROTEINS	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	07-83	2	BBCB	129,330	181,762
5	R01 GM13956-17 11920	COATES, ROBERT M SPECIFICITY IN TERPENE AND STEROL BIOSYNTHESIS	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	02-83	0	MCHA	72,275	102,284
5	R01 GM13957-16 21320	MORRIS, DAVID R BIOSYNTHESIS AND BIOLOGICAL FUNCTION OF POLYAMINES	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	04-83	0	PC	66,181	88,616
5	R01 GM13972-17 22300	LIPMANN, FRITZ GLUCOSE AND PHOSPHATE METABOLISM IN NORMAL AND MALIGNANT	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	08-83	0	PC	90,843	142,624
5	R01 GM14033-16 22400	SHRAGO, EARL S CONTROL MECHANISMS IN INTERMEDIARY METABOLISM	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	12-82	2	PC	50,751	72,144
5	R01 GM14078-16 22500	TAFT, ROBERT W HYDROGEN BONDING AND IONIC SOLVATION BY NMR AND ICR	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	11-82	0	BBCB	46,370	60,745
5	R01 GM14108-17 21200	GANESAN, ADAYAPALAM T DNA SYNTHESIS AND GENETIC RECOMBINATION IN B. SUBTILIS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	07-83	2	MG	81,878	129,367
5	R01 GM14237-15 12930	SLAYTER, HENRY S ELECTRON MICROSCOPY OF MACROMOLECULAR STRUCTURES	SIDNEY FARBER CANCER INSTITUTE	BOSTON	MASSACHUSETTS	82	03-83	1	CBY	55,679	92,224

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5	R01 GM14276-18 22400	GIBSON, QUENTIN H KINETICS OF ENZYMES AND HEMOGLOBIN-LIGAND REACTIONS	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	05-83	1	BMT		97,066	143,108
2	R01 GM14312-28 22500	SCHERAGA, HAROLD A INTERNAL BONDING IN PROTEINS	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	12-82	4	BBCB		98,600	139,344
5	R01 GM14358-16 21280	FREIFELDER, DAVID M PHYSICOCHEMICAL AND GENETIC STUDIES OF DNA FUNCTION	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	11-82	0	MBC		45,952	74,442
5	R01 GM14363-17 22250	KANE, ROBERT E CELL PROTEINS IN DIVISION AND EARLY DEVELOPMENT	UNIVERSITY OF HAWAII AT MANOA	HONOLULU	HAWAII	82	08-83	3	CBY		38,421	53,825
2	R01 GM14372-16 AI 21200	NOVICK, RICHARD P MOLECULAR BIOLOGY OF BACTERIAL PLASMIDS	PUBLIC HLTH RES INST OF THE CITY OF NY	NEW YORK	NEW YORK	82	11-82	4	MG		105,615	146,355
2	R01 GM14479-17 22450	JAGENDORF, ANDRE T MEMBRANE-ASSOCIATED PHOSPHORYLATION	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	08-83	2	PB		79,702	113,124
5	R01 GM14569-14 12820	HARRISON, WILLARD W BIOLOGICAL TRACE ANALYSIS BY HOLLOW CATHODE GLOW	UNIVERSITY OF VIRGINIA	CHARLOTTESVILLE CHARLOTTESVILLE	VIRGINIA	81	07-83	0	BMT		43,455	60,175
2	R01 GM14595-16 22300	SCHIFF, JEROME A STUDIES OF THE CONTINUITY OF CELLULAR ORGANELLES	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	11-82	2	BBCA		110,800	154,033
2	R01 GM14603-16 22500	TIMASHEFF, SERGE N STRUCTURE AND INTERACTIONS OF PROTEINS IN SOLUTION	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	11-82	4	BBCA		53,000	84,310
2	R01 GM14628-17 22300	THOMPSON, THOMAS E A STUDY OF PHOSPHOLIPID BILAYER MEMBRANES	UNIVERSITY OF VIRGINIA	CHARLOTTESVILLE CHARLOTTESVILLE	VIRGINIA	82	04-83	4	BBCB		76,260	107,877
5	R01 GM14642-15 22250	ROSENBAUM, JOEL L SYNTHESIS AND ASSEMBLY OF FLAGELLAR PROTEINS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	07-83	3	MBY		115,512	191,748
5	R01 GM14652-16 21750	LEE, NANCY L GENETIC CONTROL OF PROTEIN SYNTHESIS IN E. COLI	UNIVERSITY OF CALIFORNIA	SANTA BARBARA SANTA BARBARA	CALIFORNIA	82	12-82	1	MG		67,982	89,056

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2	R01 GM14711-16 21200	INMAN, ROSS B STRUCTURE AND REPLICATION OF DNA	UNIVERSITY OF WISCONSIN MADISON	MADISON MADISON	WISCONSIN	82	12-82	4	MG	110,930	155,733
5	R01 GM14772-15 22300	DIAMOND, JARED M WATER TRANSPORT ACROSS EPITHELIAL MEMBRANES	UNIVERSITY OF CALIFORNIA	LOS ANGELES LOS ANGELES	CALIFORNIA	82	03-83	1	PHY	96,460	125,898
5	R01 GM14825-16 21100	CANTOR, CHARLES R NEW TECHNIQUES FOR COMPLEX MACROMOLECULAR ASSEMBLIES	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	01-83	2	BBCA	86,370	144,756
2	R01 GM14931-16 21600	SCHIMKE, ROBERT T ENZYME SYNTHESIS AND DEGRADATION IN METABOLIC CONTROL	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	11-82	4	BIO	109,479	163,987
5	R01 GM14945-16 22400	WESTHEAD, EDWARD W, JR DIVALENT CATIONS IN ENOLASE AND OTHER BIOLOGICAL SYSTEMS	UNIVERSITY OF MASSACHUSETTS AMHERST	AMHERST	MASSACHUSETTS	82	05-83	0	BIO	61,773	87,906
5	R01 GM14957-15 21320	DUBIN, DONALD T R-RNA & RIBOSOME SYNTHESIS IN BACTERIA & ANIMAL CELLS	RUTGERS MEDICAL SCHOOL	PISCATAWAY	NEW JERSEY	82	01-83	3	MBY	74,965	123,071
5	R01 GM14971-17 22300	TIEN, H TI BILAYER LIPID MEMBRANES IN AQUEOUS MEDIA	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	08-83	1	BBCB	90,780	126,175
5	R01 GM15000-13 22550	RICHARDSON, DAVID C CRYSTALLOGRAPHIC ANALYSIS OF PROTEIN STRUCTURES	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	05-83	1	BBCB	113,460	168,540
5	R01 GM15102-15 22400	KOHLHAW, GUNTER B REGULATION OF LEUCINE BIOSYNTHESIS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	11-82	1	BIO	51,638	78,923
2	R01 GM15142-13A1 21750	BREMER, HANS REGULATION OF BACTERIAL GROWTH	UNIVERSITY OF TEXAS DALLAS	RICHARDSON	TEXAS	82	06-83	2	MG	76,922	100,240
2	R01 GM15188-15A1 22400	FISHER, HARVEY F STRUCTURE AND MECHANISMS OF ACTION OF ENZYMES	UNIVERSITY OF KANSAS COL HLTH SCI & HOSP	KANSAS CITY	KANSAS	82	03-83	4	BIO	72,115	95,366
5	R01 GM15225-14 21320	SIGLER, PAUL B STRUCTURAL ANALYSIS OF BIOLOGICAL MACROMOLECULES	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	08-83	0	BBCA	82,905	136,052

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2 M	P50 GM15253-16 21915	MOTULSKY, ARNO G CENTER FOR INHERITED DISEASES	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	05-83	4	SRC		502,970	673,477
5	R01 GM15255-17 21250	MARGOLIN, PAUL MUTATION AND SUPPRESSOR STUDIES OF A BACTERIAL GENE	PUBLIC HLTH RES INST OF THE CITY OF NY	NEW YORK	NEW YORK	82	05-83	1	MG		120,154	168,597
5	R01 GM15373-13 11920	JENSEN, FREDERICK R DEMETALLATION, ALKYLATION AND BIOCHEMICAL PROCESSES	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	02-83	0	BMT		57,650	75,190
5	R01 GM15381-12 21750	NIERLICH, DONALD P REGULATION OF RNA SYNTHESIS	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	79	12-82	0	MBC		44,308	57,888
5	R01 GM15399-14 21320	MAITRA, UMADAS ENZYMATIC SYNTHESIS OF BIOLOGICALLY ACTIVE MACROMOLECULE	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	04-83	1	MBY		100,002	183,811
2 M	P50 GM15426-16 13300	BOURKE, ROBERT S ON-LINE COMPUTER STUDY OF THERAPY FOR HUMAN SHOCK	ALBANY MEDICAL COLLEGE	ALBANY	NEW YORK	82	06-83	2	SRC		378,704	549,555
5 M	P50 GM15431-15 11300	OATES, JOHN A RESEARCH CENTER FOR PHARMACOLOGY AND DRUG TOXICOLOGY	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	11-82	0	SSS		991,453	1,517,625
5	R01 GM15438-13 21320	O'BRIEN, THOMAS W CHARACTERIZATION OF MAMMALIAN MITOCHONDRIAL RIBOSOMES	UNIVERSITY OF FLORIDA	GAINESVILLE	FLORIDA	81	11-82	0	MBY		44,664	63,163
5	R01 GM15539-15 21320	SCHIMMEL, PAUL R INVESTIGATIONS OF REACTIONS OF PHYSIOLOGICAL IMPORTANCE	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	05-83	1	BBCA		109,553	151,754
5	R01 GM15547-16 22500	PETICOLAS, WARNER L LASER RAMAN SCATTERING FROM BIOLOGICAL MACROMOLECULES	UNIVERSITY OF OREGON	EUGENE	OREGON	82	08-83	0	BBCB		74,370	105,580
5	R01 GM15590-16 22300	KAPLAN, SAMUEL INDUCTION AND BIOGENESIS OF SUBCELLULAR ORGANELLES	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	12-82	2	MBC		78,716	110,989
2	R01 GM15591-15 11790	TU, ANTHONY T HEMORRHAGIC AND NECROTIC TOXINS IN SNAKE VENOMS	COLORADO STATE UNIVERSITY	FORT COLLINS	COLORADO	82	05-83	4	TOX		55,060	74,221

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5	R01 GM15691-15 21700	LUCCHESI, JOHN C GENETIC REGULATION IN DROSOPHILA: DOSAGE COMPENSATION	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	08-83 106,302	1	GEN 144,039
5	P01 GM15731-14 22500	WALSH, KENNETH A BIOLOGICAL CONTROL BY LIMITED PROTEOLYSIS	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	81	11-82 282,001	0	555 374,481
3	P01 GM15731-14S1 22500	WALSH, KENNETH A PROTEOLYSIS AND PROCESSING OF PROTEIN STRUCTURES	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	11-82 66,750	0	BIO 1 89,445
5	R01 GM15761-14 22300	SLAYMAN, CAROLYN W GENETIC STUDY OF ION TRANSPORT IN NEUROSPORA	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83 71,391	1	GEN 112,798
5	P01 GM15768-13 13300	BORDER, JOHN R SEQUENCE OF ORGAN FAILURES FOLLOWING TRAUMA	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	81	06-83 247,487	0	SRC 316,346
5	R01 GM15792-16 21100	VON HIPPEL, PETER H STRUCTURE AND RELATIONS OF PROTEINS AND NUCLEIC ACIDS	UNIVERSITY OF OREGON	EUGENE	OREGON	82	12-82 116,400	0	BBCA 155,923
5	R01 GM15837-15 22300	WRIGHT, ANDREW STRUCTURE AND FUNCTION OF THE CELL MEMBRANE	TUFTS UNIVERSITY	BOSTON	MASSACHUSETTS	82	04-83 76,675	3	MBC 121,530
2	R01 GM15847-13 12820	KARGER, BARRY L STUDIES IN HIGH PERFORMANCE LIQUID CHROMATOGRAPHY	NORTHEASTERN UNIVERSITY	BOSTON	MASSACHUSETTS	82	11-82 92,045	2	555 123,919
5	R01 GM15858-15 22300	SLAYMAN, CLIFFORD L, JR KINETICS AND REGULATION OF H+ TRANSPORT IN NEUROSPORA	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	04-83 104,722	3	PHY 165,461
5	R01 GM15883-18 21400	PIOUS, DONALD A GENETIC STRUCTURE AND FUNCTION IN HUMAN CELLS	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	01-83 90,923	0	GEN 121,746
5	R01 GM15886-16 21600	COMINGS, DAVID E PHYSIOLOGY AND BIOCHEMISTRY OF HUMAN CHROMOSOMES	CITY OF HOPE NATIONAL MEDICAL CENTER	DUARTE	CALIFORNIA	82	11-82 90,867	2	GEN 130,667
5 M	P50 GM15904-15 13100	KITZ, RICHARD J ANAESTHESIOLOGY CENTER FOR RESEARCH AND TEACHING	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	12-82 253,775	1	PTR 388,016

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5	R01 GM15924-15 22300	STRITTMATTER, PHILIPP STUDY OF STRUCTURE AND FUNCTION OF MICROSOMAL MEMBRANES	UNIVERSITY OF CONNECTICUT HEALTH CENTER	FARMINGTON	CONNECTICUT	82	05-83	0	PC		138,000	198,975
5	R01 GM15971-15 22300	SINGER, S JONATHAN MOLECULAR APPROACHES TO CELL ULTRASTRUCTURE	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	04-83	3	CTY		138,969	181,119
5	R01 GM15997-13 11940	HART, HAROLD STUDIES IN ORGANIC SYNTHESES	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	05-83	1	MCHA		50,324	70,957
5	R01 GM16059-12 21250	RUDNER, RIVKA MACROMOLECULAR ASPECTS OF SYNCHRONOUS CELL DIVISION	HUNTER COLLEGE	NEW YORK	NEW YORK	81	11-82	0	MBC		47,415	76,146
5	R01 GM16066-15 21100	TS'O, PAUL O NUCLEIC ACID CHEMISTRY AND ITS BIOMEDICAL APPLICATION	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	06-83	0	SSS		129,257	191,386
5	R01 GM16074-14 21800	ENFIELD, FRANKLIN D INVESTIGATIONS IN QUANTITATIVE GENETICS	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	08-83	0	GEN		56,000	76,160
5	R01 GM16133-14 12820	UPDIKE, STUART J IMMOBILIZED ENZYMES TO ALTER AND ANALYZE METABOLISM	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	81	06-83	0	PBC		53,095	74,067
5	R01 GM16260-14 22600	WILLIAMS, DONALD E INTERMOLECULAR INTERACTIONS IN AMINO ACIDS AND PEPTIDES	UNIVERSITY OF LOUISVILLE	LOUISVILLE	KENTUCKY	82	12-82	1	BBCA		34,800	52,444
5	R01 GM16317-15 21320	DEUTSCHER, MURRAY P ENZYMOLOGY AND CONTROL OF AMINO ACID ACTIVATION	UNIVERSITY OF CONNECTICUT HEALTH CENTER	FARMINGTON	CONNECTICUT	82	08-83	1	PC		126,016	182,723
5	R01 GM16329-15 21200	HILL, CHARLES W GENETICS AND BIOCHEMISTRY OF MISSENSE SUPPRESSION	PENNSYLVANIA STATE UNIV HERSHEY MED CTR	HERSHEY	PENNSYLVANIA	82	08-83	2	MG		119,589	158,413
5	R01 GM16370-12 21800	PHAFF, H J GENOME COMPARISON AS A BASIS FOR YEAST SYSTEMATICS	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	11-82	0	BM		64,682	84,485
2	R01 GM16389-13 22410	BLUMENFELD, OLGA O PROTEINS OF THE CELL MEMBRANE	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	12-82	2	CTY		86,106	157,200

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5	R01 GM16406-14 22500	DEBRUNNER, PETER G RESONANCE SPECTROSCOPY OF ENZYMES	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	12-82	1	BBCB		72,600	102,958
5	R01 GM16429-15 22550	LUDWIG, MARTHA L ENZYMES IN THE CRYSTALLINE STATE: STRUCTURE AND ACTIVITY	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	08-83	3	BBCB		112,440	177,655
5	R01 GM16449-15 22500	LIPPARD, STEPHEN J LIGAND-BRIDGED BINUCLEAR METAL COMPLEXES AND PROTEINS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	08-83	0	SSS		71,143	120,033
5	R01 GM16488-15 11360	ESTABROOK, RONALD W HEPATIC MICROSOMAL DRUG OXIDATION	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	08-83	0	PTR		119,723	161,515
5	R01 GM16501-12 12100	GARFINKEL, DAVID COMPUTER MODELING METHODS FOR METABOLIC SYSTEMS	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	81	03-83	0	SSS		63,618	104,970
5	R01 GM16503-14 11850	FUJIMOTO, JAMES M ALTERATION IN DRUG METABOLISM BY CERTAIN CARBAMATES	MEDICAL COLLEGE OF WISCONSIN	MILWAUKEE	WISCONSIN	82	11-82	2	PHRA		41,307	61,961
5	R01 GM16536-14 21250	HINTON, CLAUDE W CHROMOSOME BEHAVIOR IN DROSOPHILA	COLLEGE OF WOOSTER	WOOSTER	OHIO	82	12-82	2	GEN		15,062	22,387
5	R01 GM16547-17 21250	RUPERT, CLAUD S REPAIR OF RADIATION-DAMAGED NUCLEIC ACID	UNIVERSITY OF TEXAS DALLAS	RICHARDSON	TEXAS	82	03-83	0	RAD		87,366	117,944
5	R01 GM16552-14 22500	WAUGH, JOHN S HIGH RESOLUTION NMR IN SOLIDS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	03-83	0	BBCB		108,340	158,175
5	R01 GM16564-14 22400	FIFE, THOMAS H ENZYMATIC AND NONENZYMATIC REACTIONS OF ACYL PHOSPHATES	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	03-83	0	BIO		41,179	60,121
2	R01 GM16609-14 12840	MC LAFFERTY, FRED W MASS SPECTROMETRY IN BIOMEDICAL RESEARCH	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	12-82	4	BMT		179,069	236,298
5	R01 GM16611-12 11940	GIVENS, RICHARD S EXPLORATORY AND SYNTHETIC PHOTOCHEMISTRY	UNIVERSITY OF KANSAS LAWRENCE	LAWRENCE	KANSAS	81	11-82	0	MCHA		41,059	54,008

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5	R01 GM16620-13 21250	DEERING, REGINALD A DNA REPAIR IN SLIME MOLD	PENNSYLVANIA STATE UNIVERSITY	UNIV PARK UNIVERSITY PARK	PENNSYLVANIA	82	04-83		2	RAD	93,658	125,047
5	R01 GM16767-14 22450	KING, TSOO E RECONSTITUTION OF MITOCHONDRIAL	STATE UNIVERSITY OF NEW YORK AT ALBANY RESPIRATORY CHAIN	ALBANY	NEW YORK	82	11-82		2	BIO	75,538	108,011
5	R01 GM16811-13 11770	HARDMAN, JOEL G ROLE OF CYCLIC GMP: CONTROL OF	VANDERBILT UNIVERSITY CYCLIC GMP METABOLISM	NASHVILLE	TENNESSEE	82	12-82		2	MET	97,821	151,133
5	R01 GM16835-14 21320	DAVIS, BERNARD D MEMBRANE-ASSOCIATED RIBOSOMES	HARVARD UNIVERSITY AND PROTEIN SECRETION	BOSTON	MASSACHUSETTS	82	05-83		1	MBC	85,712	167,824
5	R01 GM16916-09 22400	SPIVEY, HOWARD O PROPERTIES OF CONCENTRATED	OKLAHOMA STATE UNIVERSITY ENZYME SOLUTIONS	STILLWATER STILLWATER	OKLAHOMA	82	03-83		0	PC	35,405	46,381
5	R01 GM16925-14 22550	EISENBERG, DAVID S STRUCTURE AND ACTION OF	UNIVERSITY OF CALIFORNIA MULTISUBUNIT ENZYMES	LOS ANGELES LOS ANGELES	CALIFORNIA	82	04-83		1	BBCB	135,820	176,839
2	R01 GM16966-13 22550	MARSH, RICHARD E CRYSTAL STRUCTURE STUDIES	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	01-83		2	BBCA	50,330	74,488
2	R01 GM16974-13 22450	ALLISON, WILLIAM S STRUCTURAL STUDIES ON THE	UNIVERSITY OF CALIFORNIA ENERGY TRANSDUCING ATPASE	SAN DIEGO LA JOLLA	CALIFORNIA	82	05-83		3	PB	81,621	106,304
5	R01 GM17020-14 21320	CHAMPE, SEWELL P GENETIC CONTROL OF DEVELOPMENT	RUTGERS THE STATE UNIV IN MODEL SYSTEMS	NEW BRUNSWICK NEW BRUNSWICK	NEW JERSEY	82	04-83		0	GEN	77,035	121,715
5	R01 GM17078-14 21750	ECHOLS, G HARRISON, JR GENETIC & CHEMICAL STUDIES OF	UNIVERSITY OF CALIFORNIA PHAGE LAMBDA DEVELOPMENT	BERKELEY BERKELEY	CALIFORNIA	82	08-83		1	VR	127,691	181,194
5	R01 GM17088-13 21200	DRESSLER, DAVID H STUDIES ON DNA REPLICATION AND	HARVARD UNIVERSITY RECOMBINATION	CAMBRIDGE	MASSACHUSETTS	82	11-82		3	MG	60,808	93,644
5	R01 GM17129-12 21320	NOLLER, HARRY F, JR RIBOSOME STRUCTURE AND FUNCTION	UNIVERSITY OF CALIFORNIA	SANTA CRUZ SANTA CRUZ	CALIFORNIA	82	04-83		2	MBY	109,231	143,093

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5	R01 GM17132-14 22250	LUCK, DAVID J BIOCHEMICAL GENETICS OF MICROTUBULES	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	08-83	2	GEN		119,388	187,439
5	R01 GM17151-13 21320	RAJBHANDARY, UTTAM L STRUCTURE AND FUNCTION OF TRANSFER RIBONUCLEIC ACIDS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	05-83	0	PC		101,685	171,298
2	R01 GM17152-14 21750	FREUNDLICH, MARTIN MOLECULAR MECHANISMS IN MULTIVALENT REPRESSION	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	08-83	2	MG		67,042	96,569
5	R01 GM17158-11 13200	VAN DYKE, RUSSELL A METABOLISM OF VOLATILE ANESTHETICS	MAYO FOUNDATION	ROCHESTER	MINNESOTA	81	03-83	0	SAT		86,247	113,076
5	R01 GM17173-13 21400	MORTON, NEWTON E A RESEARCH PROGRAM IN GENETIC EPIDEMIOLOGY	UNIVERSITY OF HAWAII AT MANOA	HONOLULU	HAWAII	82	02-83	2	SSS		170,717	239,004
2	R01 GM17317-13 21200	FOGEL, SEYMOUR RECOMBINATION--DNA SYNTHESIS AND DEVELOPMENT IN YEAST	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	04-83	4	GEN		86,932	112,734
5	R01 GM17367-13 12990	HERZENBERG, LEONARD A CLINICAL AND BIOLOGICAL USES OF AUTOMATED CELL SORTING	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	12-82	1	SSS		326,059	515,173
5	R01 GM17371-10 21100	ARNOTT, STRUTHER MOLECULAR GEOMETRIES OF NUCLEIC ACIDS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	08-83	1	BBCA		60,938	83,553
5	R01 GM17378-13 21100	SUNDARALINGAM, MUTTAIYA X-RAY STUDIES ON NUCLEIC ACID CONSTITUENTS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	02-83	3	BBCA		49,959	69,823
5	R01 GM17383-12 21600	ALLFREY, VINCENT G CHEMISTRY AND METABOLISM OF DNA-ASSOCIATED PROTEINS	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	01-83	3	SSS		78,125	118,112
2	R01 GM17452-11 22300	HUANG, CHING-HSIEN PHOSPHOLIPID VESICLES--MODEL FOR BIOLOGICAL MEMBRANES	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	04-83	4	BBCB		76,044	99,644
5	R01 GM17528-25 22300	BRESLOW, ESTHER M INTERACTIONS OF PROTEINS	CORNELL UNIVERSITY MEDICAL CENTER	NEW YORK	NEW YORK	81	12-82	0	BBCB		79,096	122,296

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5	R01 GM17533-21 21600	FASMAN, GERALD D PROTEIN NUCLEIC ACID INTERACTIONS: CHROMATIN STUDIES	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	12-82	0	BBCA		99,217	157,322
5	R01 GM17534-12 22400	NISHIMURA, JONATHAN S STUDY OF SUCCINYL-COA SYNTHETASE AND RELATED ENZYMES	UNIVERSITY OF TEXAS HLTH SCI CTR SAN ANT	SAN ANTONIO	TEXAS	82	08-83	1	PBC		56,735	77,160
2	R01 GM17536-13 13200	FEINSTEIN, MAURICE B MECHANISM OF ACTION OF ANESTHETICS	UNIVERSITY OF CONNECTICUT HEALTH CENTER	FARMINGTON	CONNECTICUT	82	12-82	4	PHY		81,519	112,803
5	R01 GM17575-11 22400	GORENSTEIN, DAVID G NMR PROBES OF ENZYMES AND NUCLEIC ACIDS	UNIVERSITY OF ILLINOIS CHICAGO CIRCLE	CHICAGO	ILLINOIS	82	12-82	2	BBCB		49,212	75,288
5	P50 GM17702-12 * 21916	SEEGMILLER, JARVIS E HUMAN BIOCHEMICAL GENETICS PROGRAM	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	11-82	3	SRC		428,982	561,966
5	R01 GM17709-13 21700	HARTWELL, LELAND H GENETIC ANALYSIS OF THE EUKARYOTIC CELL CYCLE	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	08-83	2	MBC		107,839	142,804
5	R01 GM17724-12 22300	WIDNELL, CHRISTOPHER C PLASMA MEMBRANE STRUCTURE, FUNCTION, AND BIOGENESIS	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	06-83	3	MBY		92,576	139,416
2	R01 GM17855-12 22500	BLOOMFIELD, VICTOR A PHYSICAL CHEMISTRY OF BACTERIAL VIRUSES	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	05-83	4	BBCA		117,880	147,393
5	R01 GM17880-12 11920	COLLMAN, JAMES P MODELS FOR CYTOCHROME P450 HYDROXYLASES	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	11-82	0	MCHB		79,602	125,771
5	R01 GM17892-13 21320	NEIDHARDT, FREDERICK C REGULATION OF BACTERIAL METABOLISM	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	08-83	0	MBC		78,960	124,757
5	R01 GM17924-12 21320	TRAUT, ROBERT R RIBOSOME STRUCTURE AND FUNCTION	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	04-83	1	PC		105,209	136,097
5	P01 GM17940-13 12400	MEINDL, JAMES D BME CENTER FOR INTEGRATED ELECTRONICS IN MEDICINE	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	08-83	0	555		582,000	983,580

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2	R01 GM17959-10 13900	MERYMAN, HAROLD T PRESERVATION OF ORGANS BY FREEZING	AMERICAN NATIONAL RED CROSS	WASHINGTON	DIST OF COL	82	02-83	2	SAT	93,456	158,735
5	R01 GM17980-13 21320	KING, JONATHAN A BACTERIOPHAGE ASSEMBLY AND ITS GENETIC CONTROL	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	08-83	0	VR	93,293	141,339
5	R01 GM17995-10 21600	KEDES, LAURENCE H EMBRYONIC CHROMOSOMAL PROTEINS AND THEIR RNA TEMPLATES	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	04-83	1	CBY	74,217	107,615
5	R01 GM18006-11 22300	SCHNAITMAN, CARL A CELL SURFACE MEMBRANE PROTEINS	UNIVERSITY OF VIRGINIA	CHARLOTTESVILLE CHARLOTTESVILLE	VIRGINIA	82	03-83	2	MBY	54,478	78,588
5	R01 GM18012-08 21200	YEH, YUN-CHI BIOCHEMICAL AND GENETIC STUDIES OF DNA SYNTHESIS	UNIVERSITY OF ARKANSAS MED SCIENCES	LITTLE ROCK	ARKANSAS	80	03-83	0	MBC	45,492	60,401
5	R01 GM18051-11 22600	FRAUENFELDER, HANS HEME PROTEIN REACTIONS	UNIVERSITY OF ILLINOIS	URBANA-CHAMPAIGN URBANA	ILLINOIS	82	05-83	2	BBCB	93,755	129,182
5	R01 GM18080-09 21700	HILLMAN, RALPH GENETIC TRANSLATION AS A CELLULAR CONTROL MECHANISM	TEMPLE UNIVERSITY	PHILADELPHIA	PENNSYLVANIA	81	02-83	0	GEN	42,500	61,625
5	R01 GM18092-09 22500	HOOKER, THOMAS M, JR CONFORMATIONS OF BIOLOGICALLY IMPORTANT MOLECULES	UNIVERSITY OF CALIFORNIA SANTA BARBARA	SANTA BARBARA	CALIFORNIA	81	12-82	0	BBCA	42,000	55,020
5	R01 GM18172-12 22400	FRUTON, JOSEPH S PROTEIN CONFORMATION AND ENZYME CATALYSIS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	05-83	2	BIO	66,892	105,689
5	R01 GM18243-11 21600	PETTIJOHN, DAVID E PACKAGING OF DNA IM CHROMOSOMES	UNIVERSITY OF COLORADO HLTH SCIENCES CTR	DENVER	COLORADO	82	11-82	3	CTY	70,255	86,777
5	R01 GM18277-12 21750	SCHLEIF, ROBERT F REGULATORY MECHANISMS OF THE ARABINOSE OPERON	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	04-83	1	MBC	74,885	120,694
2	R01 GM18278-12 11910	KOLATTUKUDY, P E BIOCHEMISTRY OF NATURAL PRODUCTS	WASHINGTON STATE UNIVERSITY	PULLMAN	WASHINGTON	82	12-82	4	PC	159,000	226,230

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5	R01 GM18305-11 22300	WEBSTER, ROBERT E BIOSYNTHESIS OF A MEMBRANE PROTEIN	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	12-82	0	MBC		65,544	97,816
5	R01 GM18325-12 22400	WOLFENDEN, RICHARD V CHEMICAL MECHANISMS OF BIOSYNTHESIS	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	06-83	2	BIO		83,853	112,911
5	R01 GM18360-11 11870	TAYLOR, PALMER W KINETICS OF DRUG MACROMOLECULE COMPLEX FORMATION	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	12-82	2	NLS		79,016	103,201
5	R01 GM18362-05 11920	YANKWICH, PETER E MODELING THE TRANSITION STATE OF ENZYMIC REACTIONS	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGH	URBANA	ILLINOIS	81	05-83	1	BBCA		31,464	45,234
5	R01 GM18375-11 21200	WOLSTENHOLME, DAVID R STRUCTURE OF MITOCHONDRIAL DNA	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	81	08-83	0	CTY		96,106	139,354
5	R01 GM18386-13 21750	GEIDUSCHEK, E PETER NUCLEIC ACIDS AND NUCLEOPROTEINS	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	08-83	2	MG		173,448	228,576
5	R01 GM18405-11 22300	GLASER, LUIS REGULATION AND MECHANISM OF CELL SURFACE SYNTHESIS	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	04-83	1	PBC		102,853.	158,872
5	R01 GM18453-08 22400	SILVERSTEIN, EMANUEL ENZYME MECHANISM AND CONTROL	DOWNSTATE MEDICAL CENTER	NEW YORK	NEW YORK	81	11-82	0	BIO		53,859	76,747
2	R01 GM18455-09 21100	SUNDARALINGAM, MUTTAIYA X-RAY DIFFRACTION STUDIES OF RIBONUCLEIC ACIDS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	06-83	2	BBCA		56,165	79,677
5	R01 GM18457-12 22300	CRAMER, WILLIAM A THE MECHANISM OF ACTION OF COLICIN	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	08-83	1	BBCB		61,866	86,012
5 *	P50 GM18470-11 13300	TRUNKEY, DONALD D TRAUMA CENTER RESEARCH PROGRAM	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	06-83	0	SRC		336,241	410,214
5	R01 GM18476-09 21700	KATZ, EUGENE R DEVELOPMENTAL GENETIC STUDIES ON CELLULAR SLIME MOLDS	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	81	04-83	0	GEN		60,395	85,907

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								DIRECT		TOTAL
5	R01 GM18519-12 11940	COREY, ELIAS J COMPUTER-ASSISTED ANALYSIS OF CHEMICAL SYNTHESIS	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	06-83	3	MCHA	187,264
								121,600		
5	R01 GM18528-21 22500	KAMEN, MARTIN D MOLECULAR BASIS FOR FUNCTION OF IRON PROTEINS	UNIVERSITY OF CALIFORNIA SAN DIEGO LA JOLLA		CALIFORNIA	81	11-82	0	BBCA	115,124
								88,853		
3	R01 GM18528-21S1 22500	MEYER, TERRANCE E MOLECULAR BASIS FOR FUNCTION OF IRON PROTEINS	UNIVERSITY OF CALIFORNIA SAN DIEGO LA JOLLA		CALIFORNIA	82	11-82	0	PB	29,166
								21,913		
5	R01 GM18538-12 22200	KUEHN, GLENN D POLYAMINES AND GENE CONTROL IN PHYSARUM POLYCEPHALUM	NEW MEXICO STATE UNIVERSITY LAS CRUCES	LAS CRUCES	NEW MEXICO	82	08-83	2	MBY	71,733
								45,449		
5	R01 GM18539-12 22300	SIMONI, ROBERT D MEMBRANE FUNCTION AND CELLULAR ENERGETICS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	07-83	1	MBC	126,439
								80,759		
2	R01 GM18541-11 22250	BYERS, BRECK E MOLECULAR CYTOLOGY OF THE CELL CYCLE	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	05-83	4	GEN	120,039
								90,205		
5	R01 GM18568-10 21750	LOSICK, RICHARD M ROLE OF RNA POLYMERASE IN BACTERIAL DIFFERENTIATION	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	01-83	2	MBC	135,498
								87,986		
5	R01 GM18586-11 21750	SALSER, WINSTON A NUCLEOTIDE SEQUENCING METHODS FOR ONCOGENIC VIRUSES	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	02-83	2	GEN	97,968
								75,140		
5	R01 GM18628-12 22400	TAKAHASHI, MARK T REGULATION OF THREONINE-SENSITIVE ASPARTOKINASE ACTIVITY	RUTGERS MEDICAL SCHOOL	PISCATAWAY	NEW JERSEY	82	08-83	0	BMT	91,670
								55,390		
2	R01 GM18639-11 12930	STAEHELIN, L ANDREW STRUCTURE AND FUNCTION OF ULTRARAPIDLY FROZEN CELLS	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	03-83	4	CTY	128,951
								92,438		
5	R01 GM18648-11 22450	ERMAN, JAMES E THE MECHANISM OF CYTOCHROME C PEROXIDASE CATALYSIS	NORTHERN ILLINOIS UNIVERSITY	DE KALB	ILLINOIS	82	07-83	0	BIO	64,575
								46,730		
2	R01 GM18649-24 21200	BESSMAN, MAURICE J ENZYMATIC SYNTHESIS OF NUCLEOTIDES AND DNA	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	11-82	4	PC	115,726
								77,484		

TABLE-1 RESEARCH GRANTS ACTIVE AS OF 09-30-82 BY GRANT NUMBER

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5	R01 GM18673-11 21310	KRAKOW, JOSEPH S RNA SYNTHESIS BY BACTERIAL RNA POLYMERASE	HUNTER COLLEGE	NEW YORK	NEW YORK	82	11-82	1	PC		75,398	121,760
5	R01 GM18678-12 21600	NOVITSKI, EDWARD THE SYNTHESIS AND ANALYSIS OF CHROMOSOMES	UNIVERSITY OF OREGON	EUGENE	OREGON	82	08-83	1	GEN		58,322	84,042
2	R01 GM18684-11 21480	TAYLOR, BENJAMIN A GENETIC ANALYSIS OF COMPLEX INFIRMITIES	JACKSON LABORATORY	BAR HARBOR	MAINE	82	06-83	4	MGN		122,588	164,907
2	R01 GM18694-09A1 22500	GOODMAN, MURRAY MODEL SYSTEMS FOR STUDIES OF PEPTIDE CONFORMATIONS	UNIVERSITY OF CALIFORNIA SAN DIEGO LA JOLLA		CALIFORNIA	82	03-83	2	BBCA		65,310	84,874
5	R01 GM18711-11 22250	BROKAW, CHARLES J MECHANISMS OF MOVEMENT OF SIMPLE SPERM FLAGELLA	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	07-83	0	CBY		70,984	104,336
2	R01 GM18752-09A1 11440	GLASS, JOHN D SOLID-PHASE PEPTIDE SYNTHESIS IN ORGANIC SOLVENT MEDIA	MOUNT SINAI SCHOOL OF MEDICINE	NEW YORK	NEW YORK	82	08-83	2	MCHA		77,904	115,342
5	R01 GM18754-21 11920	BRESLOW, RONALD C BIOCHEMICAL MODEL REACTIONS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	12-82	3	MCHA		111,610	186,382
5	R01 GM18770-10 12100	GOOD, IRVING J PROBABILITY ESTIMATION	VIRGINIA POLYTECHNIC INST AND ST UNIV	BLACKSBURG	VIRGINIA	82	11-82	2	555		77,573	110,929
5	R01 GM18775-11 21320	RAVEL, JOANNE M FACTORS CONTROLLING PROTEIN SYNTHESIS	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	03-83	3	MBY		64,192	86,344
5	R01 GM18796-11 21320	GUPTA, HABA K GENETIC CODE, PROTEIN SYNTHESIS IN MAMMALIAN SYSTEMS	UNIVERSITY OF NEBRASKA LINCOLN	LINCOLN	NEBRASKA	82	11-82	0	BIO		50,556	69,767
5	R01 GM18819-09 22300	MACEY, ROBERT I CALCIUM & MAGNESIUM IN MEMBRANE TRANSPORT MAINTENANCE	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	11-82	2	PHY		54,400	71,264
2	R01 GM18835-12 21750	SCHEFFLER, IMMO E GENETICS AND BIOCHEMISTRY OF MAMMALIAN CELLS IN CULTURE	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	08-83	4	MGN		86,650	105,038

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5	R01 GM18842-10 21200	KARAM, JIM D GENETIC CONTROL OF PHAGE T4 DNA REPLICATION	MEDICAL UNIVERSITY OF SOUTH CAROLINA	CHARLESTON	SOUTH CAROLINA	82	03-83	1	52,185	EVR 67,587
5	R01 GM18852-12 11920	FLOSS, HEINZ G STEREOCHEMISTRY OF ENZYME REACTIONS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	08-83	2	96,955	BIO 134,617
5	R01 GM18858-10 22300	GETZ, GODFREY S LIPIDS AND CONTROL OF MITOCHONDRIAL BIOGENESIS	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	12-82	1	85,346	MBY 130,737
5	R01 GM18865-11 22500	LOEHR, THOMAS M LASER RAMAN SPECTROSCOPY OF METALLOPROTEINS	OREGON GRADUATE CTR STUDY AND RESEARCH	BEAVERTON	OREGON	82	04-83	1	78,810	BBCB 119,490
5	R01 GM18874-11 11940	BEAK, PETER A NEW SYNTHETIC METHODS USEFUL FOR CHEMOTHERAPEUTICS	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	07-83	2	53,736	MCHA 76,096
2	R01 GM18894-12 AM 22500	YU, NAI-TENG LASER-EXCITED RAMAN SPECTROSCOPY OF BIOPOLYMERS	GEORGIA INSTITUTE OF TECHNOLOGY	ATLANTA	GEORGIA	82	08-83	4	66,622	BBCB 97,035
5	R01 GM18904-11 21750	HALVORSON, HARLYN O REGULATION OF DIFFERENTIATION IN BACILLUS SPORES	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	12-82	2	85,574	MBC 138,010
5	R01 GM18926-11 21600	FANGMAN, WALTON L EUKARYOTIC CHROMOSOME STRUCTURE AND REPLICATION	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	12-82	3	112,505	GEN 149,898
2	R01 GM18938-11 22400	CLELAND, WILLIAM W DETERMINATION OF ENZYME MECHANISMS BY KINETIC STUDIES	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	12-82	4	90,000	BIO 126,701
5	R01 GM18969-11 21700	BRUMBAUGH, JOHN A MECHANISMS MEDIATING MELANOGENIC CONTROL GENE EFFECTS	UNIVERSITY OF NEBRASKA LINCOLN	LINCOLN	NEBRASKA	82	04-83	0	66,670	GEN 92,005
5	R01 GM18973-11 21200	BOTSTEIN, DAVID MOLECULAR GENETICS WITH PHAGE P22	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	12-82	2	51,228	VR 74,850
5	R01 GM18974-11 22300	GOODENOUGH, DANIEL A MOLECULAR BIOLOGY OF INTERCELLULAR COMMUNICATIONS	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	12-82	0	45,997	BBCA 90,062

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5	R01 GM19010-11 21200	GANESAN, ANN K DNA REPAIR IN ESCHERICHIA COLI AND BACILLUS SUBTILIS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	07-83	0	MBC		70,011	110,617
5	R01 GM19019-18 22500	BERSOHN, RICHARD BIFUNCTIONAL STUDIES OF PROTEINS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	81	10-82	0	BMT		48,699	73,376
2	R01 GM19020-14 21200	LINN, STUART M IN VITRO RESTRICTION AND MODIFICATION OF PHAGE DNA	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	12-82	4	MG		93,627	119,551
5	R01 GM19035-11 22300	PRESTEGARD, JAMES H NMR INVESTIGATIONS OF VESICULAR MEMBRANES	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	12-82	3	SSS		63,686	98,884
5	R01 GM19036-14 11860	PETERSON, JULIAN A REGULATION OF MICROBIAL OXIDATION REACTIONS	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	04-83	2	BIO		51,895	69,934
2	R01 GM19037-09 22400	KAISER, EMIL T PHOSPHATE TRANSFER ENZYMES	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	12-82	3	BIO		75,214	113,070
5	R01 GM19043-11 22300	INOUYE, MASAYORI CELL DIVISION AND MEMBRANE PROTEINS	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	12-82	2	MBC		101,572	151,485
5	R01 GM19059-11 21100	UHLENBECK, OLKE C STRUCTURE AND FUNCTION OF RIBONUCLEIC ACID	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	12-82	0	BBCA		71,780	102,215
2	R01 GM19060-10A1 21100	GRAY, DONALD M POLYNUCLEOTIDE AND POLYNUCLEOTIDE-PROTEIN STRUCTURES	UNIVERSITY OF TEXAS DALLAS	RICHARDSON	TEXAS	82	06-83	4	BBCA		74,794	96,947
2	R01 GM19078-10A1 22300	KADNER, ROBERT J GENE AMPLIFICATION AND MEMBRANE PROTEINS	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	08-83	2	SSS		57,513	81,639
2	R01 GM19091-12 22400	WAKIL, SALIH J THE METABOLISM AND CONTROL OF FATTY ACIDS	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	08-83	4	PC		162,258	209,871
5	P50 GM19100-10 21917	NITOWSKY, HAROLD M SUPPORT FOR GENETICS RESEARCH CENTER	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	11-82	0	SSS		367,200	682,992

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2	R01 GM19121-11 22450	MARGOLIASH, EMANUEL MITOCHONDRIAL MEMBRANE METABOLIC ROLE OF CYTOCHROME C	NORTHWESTERN UNIVERSITY	EVANSTON	ILLINOIS	82	12-82	4	PB	211,915	272,310
2	R01 GM19122-10A1 21200	MOSES, ROBB E MECHANISMS OF CHROMOSOME REPLICATION	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	08-83	2	BIO	69,746	91,183
5	R01 GM19168-11 21750	SONENSHEIN, ABRAHAM L ROLE OF RNA POLYMERASE IN BACTERIAL DIFFERENTIATION	TUFTS UNIVERSITY	BOSTON	MASSACHUSETTS	82	01-83	2	MBC	52,574	82,745
5	R01 GM19172-11 11790	TU, ANTHONY T SEA SNAKE VENOMS AND TOXINS	COLORADO STATE UNIVERSITY	FORT COLLINS	COLORADO	82	08-83	0	TOX	47,795	64,943
5	R01 GM19175-11 21700	MANNEY, THOMAS R GENE FUNCTIONS ASSOCIATED WITH MATING IN YEAST	KANSAS STATE UNIVERSITY	MANHATTAN	KANSAS	82	11-82	0	GEN	59,268	83,598
5	R01 GM19179-11 21600	LAIRD, CHARLES D CHROMOSOME STRUCTURE AND FUNCTION	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	02-83	2	GEN	75,753	100,179
5	R01 GM19194-11 21600	TARTOF, KENNETH D STRUCTURE AND FUNCTION OF GENES	INSTITUTE FOR CANCER RESEARCH	PHILADELPHIA	PENNSYLVANIA	82	04-83	2	GEN	109,635	166,795
5	R01 GM19199-11 21600	PRESCOTT, DAVID M THE GENETIC APPARATUS OF HYPOTRICHOUS CILIATES	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	07-83	2	CTY	108,030	151,134
2	R01 GM19242-11 21700	WRIGHT, THEODORE R ONTOGENY AND GENETIC CONTROL OF ENZYME ACTIVITY	UNIVERSITY OF VIRGINIA	CHARLOTTESVILLE CHARLOTTESVILLE	VIRGINIA	82	04-83	4	GEN	138,054	198,378
2	R01 GM19261-10A1 21250	PRAKASH, LOUISE REPAIR OF DNA DAMAGED BY UV IRRADIATION IN YEAST	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	11-82	4	RAD	64,597	109,905
5	R01 GM19267-11 22500	KUNTZ, IRWIN D, JR MACROMOLECULAR HYDRATION AND STRUCTURE	UNIVERSITY OF CALIFORNIA	SAN FRANCISCO SAN FRANCISCO	CALIFORNIA	82	01-83	3	BBCB	41,110	53,575
5	R01 GM19272-08 22250	WALTERS, MARTA S MEIOSIS: A REVISED SEQUENCE OF EVENTS IN PROPHASE	SANTA BARBARA BOTANIC GARDEN	SANTA BARBARA	CALIFORNIA	81	09-82	0	CBY	34,020	48,989

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2	R01 GM19290-10A1 21700	ORIAS, EDUARDO CONDITIONAL LETHAL MUTANTS OF TETRAHYMENA	UNIVERSITY OF CALIFORNIA SANTA BARBARA	SANTA BARBARA	CALIFORNIA	82	03-83	3	GEN		69,074	90,165
5	R01 GM19301-11 22500	TAYLOR, SUSAN S PROTEIN KINASE: PRIMARY STRUCTURE AND C-AMP INTERACTION	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	04-83	3	PB		103,150	134,545
5	R01 GM19328-11 13420	LEVENSON, STANLEY M BURN DEBRIDEMENT: CHEMICAL, ENZYMATIC	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	06-83	2	SAT		111,114	205,812
2	R01 GM19334-11 21600	OLINS, DONALD E PHYSICAL PROPERTIES OF ISOLATED NUCLEI AND CHROMOSOMES	UNIVERSITY OF TENNESSEE KNOXVILLE	KNOXVILLE	TENNESSEE	82	08-83	4	BBCA		80,780	104,076
5	R01 GM19351-11 21320	FOURNIER, MAURILLE J, JR BIOSYNTHESIS OF TRANSFER RIBONUCLEIC ACID	UNIVERSITY OF MASSACHUSETTS AMHERST	AMHERST	MASSACHUSETTS	82	05-83	0	PC		57,143	82,311
5	R01 GM19363-19 22200	GERHART, JOHN C STUDIES OF CELLULAR REGULATORY MECHANISMS	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	08-83	1	REB		116,975	161,939
5	R01 GM19386-11 21320	COOPER, TERRANCE G SYNTHESIS AND ASSEMBLY OF ENZYMES IN EUCARYOTES	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	04-83	2	PC		82,798	124,813
5	R01 GM19394-09 22300	KIRTLEY, MARY E STUDY OF GLYCOLYTIC ENZYMES BOUND TO MEMBRANES	UNIVERSITY OF MARYLAND AT BALTIMORE	BALTIMORE	MARYLAND	81	11-82	0	BIO		51,471	85,957
2	R01 GM19395-11 21100	GILHAM, P T SYNTHESIS OF POLYRIBONUCLEOTIDES OF DEFINED SEQUENCE	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	04-83	4	BIO		75,118	96,556
5	R01 GM19398-09 21280	BRAMBL, ROBERT M MITOCHONDRIAL BIOGENESIS AND FUNGAL SPORE GERMINATION	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	05-83	0	MBC		43,046	58,543
2	R01 GM19416-11 21700	HOCH, JAMES A GENETIC CONTROL OF DEVELOPMENT	SCRIPPS CLINIC AND RESEARCH FOUNDATION	LA JOLLA	CALIFORNIA	82	06-83	4	MG		135,546	220,919
2	R01 GM19420-11 11790	TEPHLY, THOMAS R METHANOL POISONING	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	11-82	4	TOX		88,291	121,462

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5	R01 GM19422-11 21320	ALTMAN, SIDNEY TRNA: STUDIES OF PRECURSORS, MUTANTS, AND FUNCTION	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	08-83	1	MG	85,161	141,030
5	R01 GM19427-11 21280	BOYNTON, JOHN E HEREDITARY CONTROL OF ORGANELLE STRUCTURE AND FUNCTION	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	04-83	2	MBC	147,471	221,207
5	R01 GM19455-11 22550	COTTON, F ALBERT STRUCTURE/FUNCTION STUDIES ON PROTEINS AND ENZYMES	TEXAS AGRI AND MECH UNIV	COLLEGE STATION COLLEGE STATION	TEXAS	82	07-83	0	BBCB	66,840	86,224
5	R01 GM19478-07 12820	KARMEN, ARTHUR MICROANALYSIS USING GAS CHROMATOGRAPHY	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	81	11-82	0	BMT	56,104	102,633
5	R01 GM19483-12 22300	FAN, DAVID P CELL GROWTH AND DIVISION	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	81	12-82	0	MBC	72,260	101,937
5	R01 GM19506-09 21320	HAMPEL, ARNOLD E AMINOACYL-TRNA SYNTHETASES IN CHO CELLS	NORTHERN ILLINOIS UNIVERSITY	DE KALB	ILLINOIS	81	11-82	0	PC	49,905	69,972
5	R01 GM19511-11 22500	DE MOSS, JOHN A ASSEMBLY OF A MEMBRANE-BOUND MULTI-ENZYME COMPLEX	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	07-83	1	MBC	81,108	110,029
5	P01 GM19521-10 21700	CHAPMAN, VERNE M GENETIC STUDY OF MAMMALIAN CONTROL SYSTEMS	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	81	04-83	0	555	567,502	781,841
3	P01 GM19521-10S1 21700	CHAPMAN, VERNE M GENETIC STUDY OF MAMMALIAN CONTROL SYSTEMS	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	04-83	0	555	186,326	269,856
5	R01 GM19536-10 22200	HASTINGS, JOHN W MOLECULAR AND CELLULAR MECHANISMS OF BIOLOGICAL RHYTHMS	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	11-82	0	CBY	57,715	85,641
5	R01 GM19548-11 22200	HOROWITZ, SAMUEL B REGULATION OF NUCLEAR-CYTOPLASMIC SOLUTE TRANSPORT	MICHIGAN CANCER FOUNDATION	DETROIT	MICHIGAN	82	07-83	1	CP	88,690	134,043
2	R01 GM19559-10 22200	PARKINSON, JOHN S GENETICS OF CHEMOTACTIC BEHAVIOR IN ESCHERICHIA COLI	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	05-83	4	MG	74,199	106,239

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5	R01 GM19566-12 11910	STEVENSON, ROBERT BISARYLPROPANOIDS OF CHEMICAL AND MEDICINAL INTEREST	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	11-82	0	MCHA		49,889	80,820
5	R01 GM19568-15 11850	LEVY, GERHARD PHARMACOKINETICS OF SALICYLATES IN CHILDREN & RATS	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	82	06-83	0	PHRA		62,616	90,949
2	R01 GM19582-10 21600	MAGUIRE, MARJORIE P CHROMOSOME STRUCTURES AND MEIOTIC MECHANISMS	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	01-83	2	GEN		15,737	21,245
5	R01 GM19595-09 22450	DILLEY, RICHARD A PROTON-MEMBRANE INTERACTIONS IN BIOENERGETICS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	81	02-83	0	BIO		42,216	62,158
5	R01 GM19607-10 21280	BIRKY, C WILLIAM, JR MECHANISMS OF ORGANELLE TRANSMISSION GENETICS	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	82	07-83	1	GEN		89,175	122,170
5	R01 GM19629-11 22300	HENRY, SUSAN A GENETICS AND DEVELOPMENT OF YEAST MEMBRANE MUTANTS	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	08-83	3	GEN		127,620	232,213
5	R01 GM19643-09 22400	HAGEMAN, JAMES H SERINE PROTEASES AND PROTEIN TURNOVER IN BACILLI	NEW MEXICO STATE UNIVERSITY LAS CRUCES	LAS CRUCES	NEW MEXICO	81	11-82	0	BIO		38,580	55,725
2	R01 GM19656-11 21480	RODERICK, THOMAS H STUDY OF MAMMALIAN CHROMOSOMAL INVERSIONS	JACKSON LABORATORY	BAR HARBOR	MAINE	82	08-83	4	MGN		69,526	91,657
5	R01 GM19670-10 21750	REZNIKOFF, WILLIAM S PROMOTER AND TRANSPOSON STRUCTURAL STUDIES	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	08-83	2	MBC		80,178	114,655
5	R01 GM19673-11 21750	DOI, ROY H ROLE OF RNA POLYMERASE IN BACTERIAL DIFFERENTIATION	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	08-83	3	MG		66,863	90,733
5	R01 GM19693-09 21320	SMITH, ISSAR REGULATORY MECHANISMS IN RIBOSOME BIOSYNTHESIS	PUBLIC HLTH RES INST OF THE CITY OF NY	NEW YORK	NEW YORK	82	05-83	1	MBC		69,535	96,863
5	R01 GM19698-11 22200	SETLOW, PETER DEGRADATION REACTIONS IN SPORE GERMINATION	UNIVERSITY OF CONNECTICUT HEALTH CENTER	FARMINGTON	CONNECTICUT	82	08-83	1	MBC		96,811	139,476

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5	R01 GM19756-11 21320	DAHLBERG, ALBERT E POLYSOMES & SUBUNITS: STRUCTURE-FUNCTION RELATIONSHIPS	BROWN UNIVERSITY	PROVIDENCE	RHODE ISLAND	82 87,049	08-83	0	PC	143,631
2	R01 GM19770-10 21800	HIRAIZUMI, YUICHIRO MALE RECOMBINATION-MUTATOR SYSTEM IN DROSOPHILA	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82 90,130	03-83	2	GEN	120,453
5	R01 GM19807-10 22300	LATIES, GEORGE G MEMBRANE PERMEABILITY AS A REGULATORY ELEMENT	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	81 60,785	11-82	0	BIO	79,318
2	R01 GM19821-07 21320	APIRION, DAVID GENETICS AND BIOCHMEISTRY OF RNA PROCESSING IN E COLI	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82 148,652	11-82	2	555	228,774
5	R01 GM19822-23 22400	KENNEDY, EUGENE P METABOLISM AND FUNCTION OF COMPLEX LIPIDS	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82 61,283	11-82	0	MBC	117,861
2	R01 GM19843-10 21320	CANTOR, CHARLES R STRUCTURAL ORGANIZATION OF RIBOSOMES AND LARGE RNAS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82 90,101	11-82	4	BBCA	147,359
5	R01 GM19848-09 21800	LEVIN, BRUCE R PROTEIN VARIATION AND SELECTION MECHANISMS IN E. COLI	UNIVERSITY OF MASSACHUSETTS AMHERST	AMHERST	MASSACHUSETTS	82 63,009	11-82	1	MBC	91,363
5	R01 GM19851-11 22200	HIRSH, DAVID I GENETIC CONTROL OF DEVELOPMENT	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82 156,574	08-83	2	GEN	219,047
5	R01 GM19875-11 22400	ROSE, ZELDA B ENZYMES OF 2,3-DIPHOSPHOGLYCERATE METABOLISM	INSTITUTE FOR CANCER RESEARCH	PHILADELPHIA	PENNSYLVANIA	82 65,900	08-83	2	PC	106,758
2	R01 GM19906-06 11920	DOWD, PAUL SYNTHESIS OF VITAMIN B12 MODELS	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82 58,530	11-82	2	BNP	88,446
5	R01 GM19907-10 22500	MARKLEY, JOHN L NMR SPECTROSCOPY IN PROTEIN CHEMISTRY	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82 68,295	05-83	0	BBCA	92,092
5	R01 GM19934-20 21700	KALLMAN, KLAUS D THE GENETIC CONTROL OF SEXUAL MATURITY IN FISH	NEW YORK ZOOLOGICAL SOCIETY	NEW YORK	NEW YORK	82 39,764	06-83	0	GEN	80,615

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T	GRANT NUMBER / PROGRAM (FINE CODE)	INVESTIGATOR / PROJECT TITLE	GRANTEE INSTITUTION	CITY	STATE	FY	END-DATE	FUT-YRS AVAILABLE	IRG	SUB	DOLLARS DIRECT	DOLLARS TOTAL
5	R01 GM19937-10 21700	FRISTROM, JAMES W GENIC/MOLECULAR BASIS OF IMAGINAL DISC MORPHOGENESIS	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	12-82	0	GEN		82,296	107,033
5	R01 GM19957-10 22200	DWORKIN, MARTIN CELL INTERACTIONS AND DEVELOPMENT IN MYXOCOCCUS XANTHUS	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	05-83	3	MBC		65,166	88,626
5	R01 GM19963-10 21750	GOLD, LAWRENCE M REGULATION OF BACTERIOPHAGE T4 GENE EXPRESSION	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	12-82	0	VR		121,619	169,659
5	R01 GM19972-13 22500	MC FADDEN, BRUCE A BIOCHEMISTRY OF MEMBRANE AND CATALYTIC PROTEINS	WASHINGTON STATE UNIVERSITY	PULLMAN	WASHINGTON	82	07-83	3	MBC		84,163	120,461
2	R01 GM19978-09 22410	GANDER, JOHN E FUNGAL GLYCOPEPTIDE BIOSYNTHESIS	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	08-83	4	MBC		76,185	103,102
5	R01 GM19988-22 22500	BALDWIN, ROBERT L PHYSICAL STUDIES OF NUCLEIC ACIDS AND PROTEINS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	12-82	0	BBCA		99,760	157,621
5	R01 GM19991-09 22500	VAN HOOK, WILLIAM A GAS-SOLUTION CALORIMETRY-SOLVENT ISOTOPE EFFECTS	UNIVERSITY OF TENNESSEE KNOXVILLE	KNOXVILLE	TENNESSEE	81	01-83	0	BBCB		37,952	53,900
5	R01 GM19993-15 21320	AMES, BRUCE N REGULATION OF GENE FUNCTION AND PROTEIN SYNTHESIS	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	12-82	0	PC		105,928	138,223
5	R01 GM19998-09 22300	WILLIAMS, JOHN A ROLE OF CELL MEMBRANE IN HORMONE SECRETION AND ACTION	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	12-82	1	CP		92,400	120,734
5	R01 GM20008-07 21100	HAMORI, EUGENE COMPUTER-BASED REPRESENTATION OF LONG DNA SEQUENCES	TULANE UNIVERSITY OF LOUISIANA	NEW ORLEANS	LOUISIANA	81	03-83	0	BBCA		20,290	27,189
5	R01 GM20011-10 22400	WALSH, CHRISTOPHER T ENZYMATIC REACTION MECHANISMS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	12-82	3	PC		117,297	198,871
2	R01 GM20015-09 22300	BELL, ROBERT M REGULATION OF MEMBRANE PHOSPHOLIPID SYNTHESIS	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	04-83	4	MBC		93,824	136,586

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2	R01 GM20024-09 HD 22200	FREEMAN, GARY L THE BASIS FOR AND ROLE OF SYMMETRY DURING EMBRYOGENESIS	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	06-83	2	CBY		55,754	71,943
5	R01 GM20052-09 21320	DELIHAS, NICHOLAS STRUCTURE AND FUNCTION OF 5S RNA IN SITU	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	08-83	0	MBY		29,460	43,406
2	R01 GM20053-18 11910	BENTLEY, RONALD BIOSYNTHESIS OF VITAMIN K	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	08-83	4	MBC		98,445	138,690
5	R01 GM20056-10 21700	HABER, JAMES E CONTROL OF CELL TYPE AND GAMETOGENESIS	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	12-82	3	GEN		78,159	125,874
2	R01 GM20064-08 22500	HOLTZER, ALFRED M PROPERTIES OF ALPHA-HELIX-FORMING SUBSTANCES	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	02-83	3	BBCB		41,670	64,589
5	R01 GM20066-10 22550	MATTHEWS, BRIAN W X-RAY STRUCTURAL STUDIES OF PROTEINS	UNIVERSITY OF OREGON	EUGENE	OREGON	82	12-82	1	BBCB		69,290	93,738
5	R01 GM20069-10 21750	SMITHIES, OLIVER GENETIC CONTROL OF PROTEIN STRUCTURE AND SYNTHESIS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	12-82	0	GEN		168,300	238,519
5	R01 GM20077-08 22400	BARDEN, ROLAND E AFFINITY LABELS FOR ACYL-COA UTILIZING ENZYME	UNIVERSITY OF WYOMING	LARAMIE	WYOMING	82	03-83	1	BIO		45,621	63,413
5	R01 GM20080-10 11920	FOOTE, CHRISTOPHER S OXIDATION OF MODEL BIOLOGICAL SYSTEMS	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	05-83	0	BBCA		53,246	69,752
5	R01 GM20091-08 11770	LEVI, ROBERTO CARDIAC DYSFUNCTIONS CAUSED BY HISTAMINE RELEASE	CORNELL UNIVERSITY MEDICAL CENTER	NEW YORK	NEW YORK	82	05-83	2	PHRA		95,593	141,478
2	R01 GM20102-10 12840	NGUYEN-HUU, XUONG COMPUTER CONTROLLED MULTIREFLECTION DIFFRACTOMETER	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	07-83	0	BBCB		138,045	175,794
5	R01 GM20113-09 22300	PERACCHIA, CAMILLO STRUCTURE & FUNCTION IN LOW RESISTANCE JUNCTIONS	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	02-83	0	MBY		71,657	116,934

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2	R01 GM20117-19 11920	GROSSWEINER, LEONARD I FAST PHOTOSENSITIZED REACTIONS OF AROMATIC COMPOUNDS	ILLINOIS INSTITUTE OF TECHNOLOGY	CHICAGO	ILLINOIS	82	04-83	2	BBCA		52,908	86,472
5	R01 GM20122-10 22400	PIGIET, VINCENT P, JR BASIS FOR REGULATION OF RIBONUCLEOTIDE REDUCTASE	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	06-83	1	PBC		52,569	78,854
5 *	P50 GM20124-10 21912	ROSENBERG, LEON E STUDY OF HUMAN GENETICS AND INHERITED DISEASE	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83	0	SSS		524,110	807,840
5 *	P50 GM20138-09 21911	SCHMICKEL, ROY HUMAN GENETICS CENTER SUPPORT	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	04-83	1	SSS		611,180	855,548
5	R01 GM20147-10 21320	PACE, NORMAN R METABOLISM OF RNA IN PROKARYOTES AND EUKARYOTES	NATIONAL JEWISH HOSPITAL & RESEARCH CTR	DENVER	COLORADO	82	06-83	0	MBY		133,521	192,512
5	R01 GM20158-10 21600	HOGNESS, DAVID S THE ARRANGEMENT OF INFORMATION IN ANIMAL CHROMOSOMES	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	01-83	0	GEN		124,856	191,820
5	R01 GM20168-10 22500	REDFIELD, ALFRED G STRUCTURAL KINETIC STUDIES BY NUCLEAR MAGNETIC RESONANCE	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	07-83	3	BBCA		104,164	186,295
5	R01 GM20172-08 22400	TAYLOR, BARRIE F ENZYMES OF AROMATIC OXIDATIONS FROM MICROORGANISMS	UNIVERSITY OF MIAMI	MIAMI	FLORIDA	82	06-83	0	MBC		68,993	98,015
5	R01 GM20173-10 21750	MARRS, BARRY L THE REGULATION OF BACTERIAL MEMBRANE FORMATION	ST. LOUIS UNIVERSITY	SAINT LOUIS	MISSOURI	82	07-83	3	MG		89,828	134,742
5	R01 GM20176-10 21250	SHAPIRO, ROBERT DAMAGED DNA: THE STRUCTURE OF DNA CROSS-LINKS	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82	08-83	0	BIO		53,260	78,225
2	R01 GM20194-10 22500	CHASTEEN, NORMAN D ANION DEPENDENT PROPERTIES OF TRANSFERRIN	UNIVERSITY OF NEW HAMPSHIRE	DURHAM	NEW HAMPSHIRE	82	06-83	4	BMT		67,157	97,029
5	R01 GM20195-25 21100	SCHELLMAN, JOHN A INTERACTIONS OF NUCLEOTIDES AND PROTEINS	UNIVERSITY OF OREGON	EUGENE	OREGON	82	03-83	0	BBCA		75,330	100,877

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2	R01 GM20198-09 11920	SCHOWEN, RICHARD L ENZYME-EFFECTOR DESIGN	UNIVERSITY OF KANSAS LAWRENCE	LAWRENCE	KANSAS	82	06-83	2	BIO	1	87,001	116,275
2	R01 GM20199-07 11920	SCHOWEN, RICHARD L BIOLOGICAL TRANSMETHYLATION	UNIVERSITY OF KANSAS LAWRENCE	LAWRENCE	KANSAS	82	11-82	2	PB		67,382	86,393
5	R01 GM20201-09 12320	KING, ALBERT I STRUCTURAL AND MECHANICAL PROPERTIES OF THE SPINE	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	82	06-83	0	AFY		63,336	90,774
5	R01 GM20212-07 22500	TANG, JORDAN J STRUCTURE AND FUNCTION OF MAMMALIAN CATHEPSIN D	OKLAHOMA MEDICAL RESEARCH FOUNDATION	OKLAHOMA CITY	OKLAHOMA	82	11-82	0	PC		42,860	58,405
2	R01 GM20261-09 21320	GERBI, SUSAN A FINE STRUCTURE OF RIBOSOMAL RNA	BROWN UNIVERSITY	PROVIDENCE	RHODE ISLAND	82	03-83	4	MBY		90,410	138,784
5	R01 GM20276-09 22500	DJERASSI, CARL MAGNETIC CIRCULAR DICHROISM--PORPHYRINS/HEME PROTEINS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	0	BMT		57,270	90,487
2	R01 GM20277-10 22300	SABATINI, DAVID D ATTACHMENT OF RIBOSOMES TO MICROSOMAL MEMBRANES	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82	12-82	4	MBY		189,377	266,509
2	R01 GM20293-10 21800	NEI, MASATOSHI THEORETICAL POPLUATION GENETICS AND ITS APPLICATIONS	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	01-83	4	GEN		61,810	85,298
5	R01 GM20298-09 13420	COHEN, IRWIN K COLLAGEN METABOLISM IN WOUND REPAIR AND KELOID	VIRGINIA COMMONWEALTH UNIVERSITY	RICHMOND	VIRGINIA	82	11-82	2	SAT		73,340	112,050
5	R01 GM20338-15 21600	COLE, R DAVID HISTONE BIOCHEMISTRY AND THE INFLUENCE OF HORMONES	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	05-83	0	PC		107,080	139,035
5	R01 GM20373-08 21200	STAHL, FRANKLIN W RECOMBINATIONAL INTERMEDIATES IN PHAGE LAMBDA	UNIVERSITY OF OREGON	EUGENE	OREGON	81	06-83	0	VR		52,839	71,397
5	R01 GM20379-09 22450	TRUMPOWER, BERNARD L STRUCTURE AND FUNCTION OF HEART MEMBRANE PROTEINS	DARTMOUTH COLLEGE	HANOVER	NEW HAMPSHIRE	82	11-82	2	BIO		60,146	89,798

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	3 R01 GM20379-09S1 22450	TRUMPOWER, BERNARD L STRUCTURE AND FUNCTION OF HEART MEMBRANE PROTEINS	DARTMOUTH COLLEGE	HANOVER	NEW HAMPSHIRE	82	11-82	15,086	2	BIO	22,523	
	5 P50 GM20387-10 11300	GAFFNEY, THOMAS E INTERDISCIPLINARY PROGRAM IN PHARMACOLOGY/TOXICOLOGY	MEDICAL UNIVERSITY OF SOUTH CAROLINA	CHARLESTON	SOUTH CAROLINA	82	01-83	423,193	0	PTR	553,453	
*	5 R01 GM20396-10 22300	BRANTON, DANIEL ORGANIZATION OF NORMAL AND TRANSFORMED CELL MEMBRANES	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	05-83	80,724	0	CTY	122,965	
	5 R01 GM20401-09 21700	POODRY, CLIFTON A GENETIC CONTROL OF DEVELOPMENT, USING DROSOPHILA	UNIVERSITY OF CALIFORNIA SANTA CRUZ	SANTA CRUZ	CALIFORNIA	82	06-83	60,754	0	GEN	79,588	
	5 R01 GM20419-05 22400	CASTRIC, PETER A PURIFICATION AND CHARACTERIZATION OF UREA AMIDOYLASE	DUQUESNE UNIVERSITY	PITTSBURGH	PENNSYLVANIA	81	11-82	25,910	0	BIO	42,695	
	5 R01 GM20427-10 21320	NOMURA, MASAYASU GENETICS AND BIOCHEMISTRY OF RIBOSOME BIOSYNTHESIS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	05-83	181,964	0	GEN	255,827	
	5 R01 GM20454-10 21480	SHOWS, THOMAS B HUMAN GENE LINKAGE RELATIONSHIPS IN CELL HYBRIDS	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	07-83	155,894	3	MGN	226,490	
	5 R01 GM20467-10 21400	CAVALLI-SFORZA, LUIGI L HUMAN POPULATION GENETICS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	07-83	167,577	3	SSS	264,772	
	5 R01 GM20470-10 21280	BOGORAD, LAWRENCE MOLECULAR MECHANISMS OF INTRACELLULAR INTEGRATION	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	05-83	66,856	0	MBY	102,958	
	2 R01 GM20478-10 22300	DOWHAN, WILLIAM STRUCTURE AND FUNCTION OF MEMBRANE PROTEINS	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	06-83	73,200	4	BIO	1 97,216	
	5 R01 GM20483-09 21600	CEDAR, HOWARD TRANSCRIPTION AND MODIFICATION OF CHROMATIN DNA	HEBREW UNIVERSITY OF JERUSALEM	JERUSALEM	ISRAEL	82	05-83	67,302	0	MGN	67,302	
	2 R01 GM20488-10 22500	MILLETT, FRANCIS S NMR STUDIES OF MEMBRANE BOUND PROTEINS	UNIVERSITY OF ARKANSAS AT FAYETTEVILLE	FAYETTEVILLE	ARKANSAS	82	07-83	61,118	2	BBCB	82,801	

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5	R01 GM20501-08 22400	DENNIS, EDWARD A ACTION OF LIPOLYTIC ENZYMES	UNIVERSITY OF CALIFORNIA	SAN DIEGO LA JOLLA	CALIFORNIA	82	05-83	3	PC		77,469	100,771
2	R01 GM20509-10 22200	ZUSMAN, DAVID R BIOCHEMICAL STUDIES OF DEVELOPMENT IN BACTERIA	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	07-83	4	MG		72,316	99,219
5	R01 GM20530-10 22550	MATHEWS, F SCOTT STRUCTURAL STUDIES OF CYTOCHROMES B562 AND B2	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	07-83	1	BBCB		77,840	120,652
5	R01 GM20552-06 22300	KUN, ERNEST ENZYMOLOGY OF GLUTATHIONE-CARBOXYLIC ACID THIOESTERS	UNIVERSITY OF CALIFORNIA	SAN FRANCISCO SAN FRANCISCO	CALIFORNIA	81	11-82	0	BIO		48,676	63,766
2	R01 GM20568-06 22550	VOET, DONALD H THE X-RAY STRUCTURE OF YEAST PYROPHOSPHATASE	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	03-83	2	BBCB		65,330	106,495
5	R01 GM20571-09 22450	MALKIN, RICHARD IRON-SULFUR PROTEINS AS BOUND ELECTRON CARRIERS	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	06-83	0	PB		47,581	65,620
2	R01 GM20606-09 21320	ARONSON, ARTHUR I MORPHOGENETIC PROCESSES IN BACTERIAL SPORULATION	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	03-83	4	MBC		77,034	106,327
5	R01 GM20608-08 21600	CHU, ERNEST H GENETIC CONTROL OF MAMMALIAN CELL METABOLISM	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	11-82	2	MGN		55,684	87,981
2	R01 GM20611-06 22550	DONOHUE, JERRY STRUCTURAL STUDIES: CONFORMATIONS AND HYDROGEN BONDS	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	11-82	2	BBCA		24,510	40,442
5	R01 GM20626-07 21320	MENNINGER, JOHN R CONTROL AND MECHANISM OF PROTEIN-CHAIN TERMINATION	UNIVERSITY OF IOWA	IOWA CITY	IOWA	80	08-83	0	PC		53,949	74,903
5	R01 GM20644-10 22250	STEPHENS, RAYMOND E THE FORMATION AND FUNCTION OF MICROTUBULES	MARINE BIOLOGICAL LABORATORY	WOODS HOLE	MASSACHUSETTS	82	08-83	0	MBY		61,954	123,908
5	R01 GM20648-09 22200	BUTLER, WARREN L PHOTORECEPTOR PIGMENTS IN PHOTORESPONSIVE ORGANISMS	UNIVERSITY OF CALIFORNIA	SAN DIEGO LA JOLLA	CALIFORNIA	82	06-83	0	BBCA		52,543	69,935

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	5 R01 GM20656-24 22400	COLOWICK, SIDNEY P ENZYMATIC OXIDATION AND PHOSPHORYLATION	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	11-82	1	BIO		96,114	147,406
	5 R01 GM20661-09 12910	SIKOV, MELVIN R EFFECT OF EXPOSURE OF THE PRENATAL RAT TO ULTRASOUND	PACIFIC NORTHWEST LABORATORIES	RICHLAND	WASHINGTON	82	03-83	1	RNM		98,305	170,628
	5 R01 GM20672-22 21100	RAMIREZ, FAUSTO SUPERPHOSPHORYLATING AGENTS	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	06-83	0	MCHA		82,934	124,181
	5 R01 GM20682-09 22550	ARNOTT, STRUTHER GLYCOSAMINOGLYCAN AND PROTEOGLYCAN STRUCTURES	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	05-83	0	BBCB		72,337	100,872
	5 R01 GM20690-09 22250	WARNER, FRED D CILIARY MOTION: DYNEIN BEHAVIOR AND MICROTUBULE SLIDING	SYRACUSE UNIVERSITY AT SYRACUSE	SYRACUSE	NEW YORK	82	05-83	2	CBY		61,462	100,177
	2 R01 GM20693-06 21320	COOPER, TERRANCE G GENETICS AND ISOLATION OF A EUCARYOTIC CONTROL PROTEIN	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	11-82	4	PC		49,637	72,276
	5 R01 GM20700-08 21480	CROCE, CARLO M ENZYME MARKERS IN THE MAPPING OF HUMAN GENES	WISTAR INSTITUTE OF ANATOMY AND BIOLOGY	PHILADELPHIA	PENNSYLVANIA	82	11-82	0	GEN		72,097	111,532
	5 R01 GM20716-09 22400	SUELTER, CLARENCE H COMPARATIVE ENZYMOLOGY OF NORMAL AND ABNORMAL TISSUE	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	05-83	1	BIO		45,195	63,725
	2 R01 GM20737-09 22300	OXENDER, DALE L TRANSPORT COMPONENTS FROM EUKARYOTES	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	03-83	4	CP		94,430	145,893
	5 R01 GM20764-08 21750	WHITELEY, HELEN R REGULATION OF RNA SYNTHESIS	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	05-83	1	PC		62,413	83,571
	5 R01 GM20818-08 21320	RHOADS, ROBERT E REGULATION OF OVALBUMIN SYNTHESIS IN CHICK OVIDUCT	UNIVERSITY OF KENTUCKY	LEXINGTON	KENTUCKY	81	11-82	0	PC		68,999	96,944
	5 P50 GM20852-09 11700	LEVY, GERHARD CLINICAL PHARMACOKINETICS AND BIOPHARMACEUTICS	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	82	12-82	1	PTR		251,587	363,342

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5	R01 GM20853-20 22400	BENDER, MYRON L MECHANISM OF ACTION OF PROTEASES	NORTHWESTERN UNIVERSITY	EVANSTON	ILLINOIS	82	06-83	1	BIO	35,317	48,509
5	R01 GM20861-09 21100	OLSON, WILMA K NUCLEIC ACID CONFORMATION, PROPERTIES, AND INTERACTIONS	RUTGERS THE STATE UNIV NEW BRUNSWICK	NEW BRUNSWICK	NEW JERSEY	82	07-83	0	BBCA	52,469	82,031
5	R01 GM20868-09 21750	BOURGEOIS-COHN, SUZANNE STUDIES OF REGULATION IN E. COLI EXTENDED TO LYMPHOMAS	SALK INSTITUTE FOR BIOLOGICAL STUDIES	LA JOLLA	CALIFORNIA	82	11-82	1	GEN	137,668	223,022
5	R01 GM20877-08 11920	BALLOU, DAVID P RAPID KINETICS STUDY OF BIOLOGICAL OXYGENASES	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	08-83	3	BMT	79,021	121,953
5	R01 GM20884-09 22400	FUCHS, JAMES A DEOXYRIBONUCLEOTIDE METABOLISM IN ESCHERICHIA COLI	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	08-83	0	MG	63,504	88,271
5	R01 GM20888-25 22400	JENCKS, WILLIAM P CHEMISTRY AND BIOCHEMISTRY OF ENERGY TRANSFER	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	11-82	1	BIO	79,842	128,662
5	R01 GM20910-06 22300	KANESHIRO, EDNA S MEMBRANE ALTERATIONS IN BEHAVIORAL MUTANTS	UNIVERSITY OF CINCINNATI	CINCINNATI	OHIO	81	11-82	0	CBY	53,157	72,407
3	R01 GM20910-06S1 22300	KANESHIRO, EDNA S MEMBRANE ALTERATIONS IN BEHAVIORAL MUTANTS	UNIVERSITY OF CINCINNATI	CINCINNATI	OHIO	81	11-82	0	CBY	28,600	28,600
2	R01 GM20919-09 21600	EICHER, EVA M CYTOGENETICS OF THE MOUSE	JACKSON LABORATORY	BAR HARBOR	MAINE	82	06-83	4	MGN	156,955	227,942
5	P01 GM20927-08 21600	DAVIDSON, ERIC H SEQUENCE STRUCTURE OF EUKARYOTIC GENOME	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	05-83	1	SSS	241,132	352,075
5	R01 GM20940-19 22400	ROSE, IRWIN A MECHANISMS OF PROTON AND PHOSPHORYL TRANSFER	INSTITUTE FOR CANCER RESEARCH	PHILADELPHIA	PENNSYLVANIA	82	12-82	1	PC	64,399	100,159
2	R01 GM20946-08 12820	DAVIS, FRANK F NONIMMUNOGENIC ENZYMES FOR THERAPEUTIC USE	RUTGERS THE STATE UNIV NEW BRUNSWICK	NEW BRUNSWICK	NEW JERSEY	82	11-82	2	ET	111,088	161,019

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2	R01 GM20964-09 AI 21700	WEIGERT, MARTIN G THE GENETIC CONTROL OF ANTIBODY DIVERSITY AND EXPRESSION	INSTITUTE FOR CANCER RESEARCH	PHILADELPHIA	PENNSYLVANIA	82	12-82	0	4	ALY	161,544	224,196
5	R01 GM20985-09 11920	NEWKOME, GEORGE R PYRIDINE HETEROMACROCYCLES: FUTURE BIOLOGICAL MODELS	LOUISIANA STATE UNIV A&M COL BATON ROUGE	BATON ROUGE	LOUISIANA	82	06-83	0	0	BMT	25,802	33,822
5	R01 GM20993-08 12820	HORVATH, CSABA G LIQUID CHROMATOGRAPHY OF BIOLOGICAL SUBSTANCES	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	01-83	0	0	MCHB	61,966	97,906
5	R01 GM21006-06 22300	PIERUCCI, OLGA ROLE OF THE BACTERIAL ENVELOPE IN CELL DUPLICATION	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	81	03-83	0	0	MBC	29,686	38,739
5	R01 GM21020-06 21600	MILLER, OSCAR L, JR ULTRA STRUCTURAL STUDIES OF GENETIC ACTIVITY	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	11-82	0	0	GEN	80,090	116,131
5	R01 GM21034-09 11920	DRYHURST, GLENN ELECTROCHEMISTRY OF PURINES	UNIVERSITY OF OKLAHOMA NORMAN	NORMAN	OKLAHOMA	82	06-83	0	0	SSS	55,097	74,381
2	R01 GM21047-09 22550	DORSET, DOUGLAS L ELECTRON DIFFRACTION OF MEMBRANE PHOSPHOLIPIDS	MEDICAL FOUNDATION OF BUFFALO	BUFFALO	NEW YORK	82	05-83	0	2	BBCB	82,470	131,952
5	R01 GM21083-07 22400	SCHRAMM, VERN L REGULATION OF ADENINE NUCLEOTIDE POOLS	TEMPLE UNIVERSITY	PHILADELPHIA	PENNSYLVANIA	82	01-83	0	0	BIO	36,572	55,584
5	R01 GM21095-08 21250	SMALL, GARY D DNA METABOLISM IN EUKARYOTES	UNIVERSITY OF SOUTH DAKOTA	VERMILLION	SOUTH DAKOTA	82	06-83	0	0	PC	31,167	41,254
5	P01 GM21096-08 21400	SLY, WILLIAM S ENZYME THERAPY IN LYSOSOMAL STORAGE DISEASES	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	05-83	0	0	SSS	310,953	478,952
5	R01 GM21098-09 22400	FRAENKEL, DAN G ENZYMES AND PATHWAYS IN GLYCOLYSIS MUTANTS	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	07-83	0	0	MBC	65,185	127,632
2	R01 GM21111-09A1 22500	BALDESCHWIELER, JOHN D PAC STUDY OF PHOSPHOLIPID VESICLE TARGETING IN VIVO	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	11-82	0	2	BBCB	84,560	125,149

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5	R01 GM21119-09 21320	GUTHRIE, CHRISTINE BIOSYNTHESIS OF TRANSFER RNAS	UNIVERSITY OF CALIFORNIA	SAN FRANCISCO SAN FRANCISCO	CALIFORNIA	82	01-83	2	GEN		87,139	113,689
5	R01 GM21120-08 21750	CARUTHERS, MARVIN H CHROMOSOME DNA REGULATORY REGIONS	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	11-82	0	PC		91,841	125,353
5	R01 GM21121-09 21600	LATT, SAMUEL A PROTEIN-DNA INTERACTIONS IN HUMAN CHROMOSOMES	CHILDREN'S HOSPITAL MEDICAL CENTER	BOSTON	MASSACHUSETTS	82	01-83	1	GEN		125,547	200,773
2	R01 GM21128-08 22300	NAGLE, JOHN F THERMODYNAMIC MEASUREMENTS ON MEMBRANES	CARNEGIE-MELLON UNIVERSITY	PITTSBURGH	PENNSYLVANIA	82	11-82	2	BBCB		50,150	68,567
5	R01 GM21133-07 21800	KOEHN, RICHARD K GENETICS AND EVOLUTION OF PHYSIOLOGICAL VARIATION	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	03-83	2	GEN		59,543	87,916
5	R01 GM21135-09 21800	EWENS, WARREN J STOCHASTIC PROCESSES IN GENETIC POPULATIONS	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	06-83	0	GEN		14,212	23,450
5	R01 GM21137-08 21700	KIGER, JOHN A, JR GENETIC STUDIES OF CYCLIC NUCLEOTIDE METABOLISM	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	03-83	3	GEN		75,053	97,730
5	R01 GM21148-06 11940	LICHTER, ROBERT L NATURAL-ABUNDANCE 15N NMR OF BIOORGANIC COMPOUNDS	HUNTER COLLEGE	NEW YORK	NEW YORK	81	11-82	0	BBCB		52,188	83,254
5	R01 GM21156-09 22500	EATON, GARETH R INTERACTION OF SPIN LABELS WITH TRANSITION METALS	UNIVERSITY OF DENVER	DENVER	COLORADO	82	06-83	0	BBCB		61,360	95,095
5	R01 GM21161-08 22500	GUNSALUS, IRWIN C PROTEIN STRUCTURE MODIFICATION AND OXIDATION	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	11-82	2	BIO		62,413	88,876
5	R01 GM21164-08 22550	MC CLURE, RICHARD J CRYSTAL STRUCTURAL STUDIES OF SERUM ALBUMIN	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	81	12-82	0	BBCB		49,906	75,857
2	R01 GM21168-09 21750	CAPECCHI, MARIO R THE CONTROL, ASSEMBLY AND TERMINATION OF PROTEINS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	11-82	4	MGN		120,562	165,572

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5	R01 GM21176-09 21100	BAUER, WILLIAM R VIRAL AND PLASMID DNA STRUCTURE, PROTEIN INTERACTIONS	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	11-82	2	VR		64,376	97,061
2	R01 GM21179-09 21800	LEWONTIN, RICHARD C GENETIC VARIATION OF PROTEINS IN NATURAL POPULATIONS	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	02-83	4	GEN		129,584	192,867
5	R01 GM21189-09 22550	DE ROSIER, DAVID J STRUCTURAL STUDIES OF BIOLOGICAL COMPLEXES	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	81	02-83	3	BBCB		87,539	141,813
5	R01 GM21189-10 22550	DE ROSIER, DAVID J STRUCTURAL STUDIES OF BIOLOGICAL COMPLEXES	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	08-83	2	BBCB		105,490	189,882
5	R01 GM21198-14 21750	LESSIE, THOMAS G BIOCHEMICAL VERSATILITY OF PSEUDOMONAS CEPACIA	UNIVERSITY OF MASSACHUSETTS AMHERST	AMHERST	MASSACHUSETTS	82	03-83	2	MBC		51,098	74,092
5	R01 GM21199-14 22400	SIGMAN, DAVID S METAL ION FUNCTION IN ENZYMES AND RECEPTOR PROTEINS	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	11-82	2	BIO		65,575	85,438
5	R01 GM21200-09 22400	COLMAN, ROBERTA F NUCLEOTIDE SITES OF GLUTAMATE DEHYDROGENASE	UNIVERSITY OF DELAWARE	NEWARK	DELAWARE	82	05-83	2	BIO		53,951	82,563
5	R01 GM21215-08 12100	MILLER, RUPERT G, JR ADAPTATION OF NEW STATISTICAL IDEAS FOR MEDICINE	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	0	SSS		76,898	121,499
2	R01 GM21220-06A1 11870	WELLS, JACK N TISSUE SPECIFIC INHIBITORS OF PHOSPHODIESTERASE	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	03-83	4	PC		65,206	94,052
2	R01 GM21225-07 22550	TULINSKY, ALEXANDER ASYMMETRY, STRUCTURE AND FUNCTION OF A-CHYMOTRYPSIN	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	11-82	2	BBCB		164,390	182,590
5	R01 GM21226-21 22400	KAMIN, HENRY BIOLOGICAL OXIDATIONS IN MITOCHONDRIA AND MICROSOMES	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	05-83	1	BIO		91,974	134,461
5	R01 GM21248-08 11940	FENSELAU, CATHERINE C APPLICATIONS OF MASS SPECTROMETRY IN PHARMACOLOGY	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	06-83	0	SSS		76,933	115,400

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2	R01 GM21249-06A1 11910	SALOMON, ROBERT G PREPROSTAGLANDIN ENDOPEROXIDES	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	82	03-83 139,424	2	BNP	179,267
5	R01 GM21253-08 21700	BOTSTEIN, DAVID MOLECULAR GENETICS OF MORPHOGENETIC PATHWAYS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	05-83 84,979	1	GEN	133,596
2	R01 GM21277-07A1 22450	CUSANOVICH, MICHAEL A BIOLOGICAL ELECTRON TRANSFER	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	03-83 81,155	4	SSS	107,056
5	R01 GM21305-08 21600	WANG, RICHARD J MITOSIS AND MITOTIC ARREST IN MAMMALIAN CELLS	UNIVERSITY OF MISSOURI COLUMBIA	COLUMBIA	MISSOURI	82	05-83 64,330	0	MGN	87,167
5	R01 GM21307-09 21750	KUSTU, SYDNEY G GENETIC STUDIES OF GLUTAMINE SYNTHETASE IN BACTERIA	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	05-83 68,780	0	MBC	90,102
5	R01 GM21310-08 21760	HOLTZMAN, JORDAN L CYTOCHROME-REDUCTASE ACTIVATION IN HYDROXYLATION	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	07-83 63,819	0	PHRA	78,497
5	R01 GM21313-08 21600	EDGELL, MARSHALL H EUKARYOTIC GENE ORGANIZATION	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	11-82 124,860	0	MGN	172,676
5	R01 GM21314-07 22500	RIGGS, AUSTEN F, II STRUCTURAL BIOCHEMISTRY OF HEMOGLOBINS AND HEMOCYANINS	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	06-83 54,280	1	PBC	73,278
5	R01 GM21328-08 11920	POULTER, C DALE SUBSTRATE ANALOGS FOR TERPENE CONDENSATION REACTIONS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	05-83 104,888	3	BNP	150,738
5	R01 GM21337-08 22450	PALMER, GRAHAM A MOLECULAR MECHANISMS OF BIOLOGICAL REDOX REACTIONS	RICE UNIVERSITY	HOUSTON	TEXAS	82	05-83 103,404	1	BMT	139,998
5	R01 GM21342-09 22300	ANDERSEN, OLAF S CHANNEL-MEDIATED ION TRANSPORT ACROSS LIPID BILAYERS	CORNELL UNIVERSITY MEDICAL CENTER	NEW YORK	NEW YORK	82	05-83 84,072	3	PHY	124,427
5	R01 GM21346-09 21600	SCHMID, CARL W, JR REPETITIVE DNA SEQUENCES IN THE HUMAN GENOME	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	08-83 56,640	3	MBY	77,484

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2	R01 GM21351-09 21280	HALLICK, RICHARD B GENE EXPRESSION IN CELL ORGANELLES	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	06-83	4	MBY		62,244	84,107
5	R01 GM21357-08 21320	SCHLESSINGER, DAVID PROCESSING & TURNOVER OF MAMMALIAN CELL RIBOSOMAL RNA	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	11-82	3	MBY		72,668	112,635
5	R01 GM21359-07 21320	BODLEY, JAMES W GUANINE NUCLEOTIDES AND PROTEIN CHAIN GROWTH	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	12-82	0	PC		66,496	90,075
5	R01 GM21361-09 22400	THOMPSON, W JOSEPH BIOLOGICAL ROLE OF CYCLIC NUCLEOTIDE PHOSPHODIESTERASE	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	06-83	1	BIO		94,867	130,308
5	R01 GM21363-09 22500	BREW, KEITH CHEMICAL STUDIES OF ENZYMES AND PROTEINS	UNIVERSITY OF MIAMI	MIAMI	FLORIDA	82	05-83	2	BIO		99,390	164,987
2	R01 GM21371-08 22550	QUIOCHO, FLORANTE A BINDING PROTEINS FOR ACTIVE TRANSPORT AND CHEMOTAXIS	RICE UNIVERSITY	HOUSTON	TEXAS	82	11-82	4	BBCB		99,880	135,541
5	R01 GM21376-05 21700	BAGSHAW, JOSEPH C TRANSCRIPTIONAL REGULATION IN EMBRYONIC DEVELOPMENT	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	81	08-83	0	MBY		51,929	70,969
5	R01 GM21422-07 21250	GOODMAN, MYRON F ERROR CORRECTION IN DNA SYNTHESIS: A BIOCHEMICAL STUDY	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	08-83	3	MG		83,408	126,554
5	R01 GM21424-08 21320	TRAUGH, JOLINDA A EFFECTS OF RIBOSOME PHOSPHORYLATION ON TRANSLATION	UNIVERSITY OF CALIFORNIA RIVERSIDE	RIVERSIDE	CALIFORNIA	82	06-83	0	MBY		61,453	83,995
5	R01 GM21436-08 22400	DATTA, PRASANTA ALLOSTERIC ENZYMES AND METABOLIC REGULATION	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	02-83	2	BIO		51,807	81,855
5	R01 GM21444-18 22400	WILLIAMS, CHARLES H, JR PYRIDINE NUCLEOTIDE-DISULFIDE OXIDOREDUCTASES	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	08-83	1	BIO		51,754	68,148
5	R01 GM21447-08 13410	SABA, THOMAS M SYSTEMIC HOST DEFENSE FOLLOWING TRAUMA	ALBANY MEDICAL COLLEGE	ALBANY	NEW YORK	82	11-82	1	SAT		55,094	88,150

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2	R01 GM21450-07 22400	WHITE, EMIL H ENZYME ACTIVE SITE MAPPING UTILIZING CARBONIUM IONS	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	11-82	2	BNP		76,902	112,958
5	R01 GM21451-08 22410	LENNARZ, WILLIAM J LIPID CARRIERS IN MEMBRANE GLYCOPROTEIN SYNTHESIS	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	05-83	2	PC		96,177	144,266
5	R01 GM21466-08 11920	HOLMES, ROBERT R PHOSPHATE MODEL FOR NUCLEASE ACTION	UNIVERSITY OF MASSACHUSETTS AMHERST	AMHERST	MASSACHUSETTS	82	12-82	1	BMT		44,436	64,432
5	R01 GM21473-08 21400	HALL, JEFFREY C NEUROGENETICS OF DROSOPHILA REPRODUCTIVE BEHAVIOR	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	11-82	0	GEN		45,201	71,056
5	R01 GM21479-08 21100	JOHNSON, WALTER C, JR NUCLEIC ACID CONFORMATION AND FUNCTION	OREGON STATE UNIVERSITY	CORVALLIS	OREGON	82	11-82	3	BBCA		62,326	79,710
5	R01 GM21487-06 21600	HARFORD, A GAYLER NATURAL CORRECTION OF GENE DEFICIENCIES	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	80	06-83	0	GEN		59,702	86,625
5	R01 GM21498-05 21600	BRUTLAG, DOUGLAS L STRUCTURE OF PERICENTRIC HETEROCHROMATIN	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	03-83	3	GEN		75,736	115,693
5	R01 GM21499-08 21320	MURGOLA, EMANUEL J MISSENSE SUPPRESSION AND MUTATIONALLY ALTERED TRNAS	UNIVERSITY OF TEXAS SYSTEM CANCER CENTER	HOUSTON	TEXAS	82	02-83	3	MG		43,448	60,175
5	R01 GM21509-08 21800	WILSON, ALLAN C REGULATION AS A BASIS FOR ORGANISMAL DIFFERENCES	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	11-82	2	MGN		105,745	138,526
5	R01 GM21510-08 21200	NEWLON, CAROL S DNA REPLICATION IN SACCHAROMYCES CEREVISIAE	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	11-82	2	GEN		82,081	112,702
5	R01 GM21514-08 21600	GILBERT, WALTER INTERACTION OF PROTEINS WITH DNA	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	11-82	0	MBC		55,569	85,576
5	R01 GM21519-08 22400	FEE, JAMES A MECHANISMS OF SUPEROXIDE DISMUTASES	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	11-82	2	BMT		74,719	118,056

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5	R01 GM21524-08 22450	WILSON, DAVID F REGULATION AND 02 DEPENDENCE OF CELLULAR METABOLISM	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	11-82	2	BIO		62,811	101,688
5	R01 GM21527-08 22250	LINCK, RICHARD W FLAGELLAR MICROTUBULES: MOLECULAR STRUCTURE-FUNCTION	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	12-82	1	MBY		78,425	151,161
5	R01 GM21534-09 22550	SALEMME, FRANCIS R X-RAY STUDIES OF PROTEIN STRUCTURE	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	07-83	0	BBCA		57,730	79,075
5	R01 GM21548-08 21700	POSTLETHWAIT, JOHN H GENE AND HORMONE CONTROL OF DROSPHILA EGG PROTEINS	UNIVERSITY OF OREGON	EUGENE	OREGON	82	11-82	2	GEN		62,847	85,346
5	R01 GM21584-08 12840	MC CLOSKEY, JAMES A MASS SPECTROMETRY OF NUCLEIC ACIDS AND THEIR ANALOGS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	12-82	1	SSS		137,088	198,778
5	R01 GM21589-08 21100	BERMAN, HELEN MODEL COMPOUNDS FOR NUCLEIC ACID INTERACTIONS	INSTITUTE FOR CANCER RESEARCH	PHILADELPHIA	PENNSYLVANIA	82	11-82	2	BBCA		56,927	85,407
5	R01 GM21595-08 21750	PEDERSON, THORU GENE TRANSCRIPTION IN EUKARYOTES	WORCESTER FDN FOR EXPER BIOLOGY	SHREWSBURY	MASSACHUSETTS	82	11-82	1	MBY		127,732	201,855
5	R01 GM21615-07 22300	MAUL, GERD G QUANTITATIVE STUDY OF NUCLEAR & ANNULATE LAMELLAE PORES	WISTAR INSTITUTE OF ANATOMY AND BIOLOGY	PHILADELPHIA	PENNSYLVANIA	82	11-82	0	CTY		63,829	108,927
5	R01 GM21619-08 21100	LAUFFER, MAX A INTERACTIONS OF TOBACCO MOSAIC VIRUS AND ITS COMPONENTS	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	02-83	1	BBCB		68,647	103,303
5	R01 GM21626-08 21600	WENSINK, PIETER C SEQUENCE ARRANGEMENT IN EUKARYOTIC DNA & CHROMOSOMES	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	11-82	0	GEN		66,072	107,037
5	R01 GM21643-08 22400	WALSH, CHRISTOPHER T COENZYME ANALOGUES AS PROBES OF FLAVOENZYME CATALYSIS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	04-83	0	BIO		62,933	85,041
5	R01 GM21648-08 22450	ROSEN, BARRY P BIOENERGETICS OF MICROBIAL MEMBRANE FUNCTIONS	UNIVERSITY OF MARYLAND AT BALTIMORE	BALTIMORE	MARYLAND	82	06-83	0	BIO		51,569	77,865

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5	R01 GM21652-08 22500	FERRY, JOHN D VISCOELASTIC PROPERTIES OF BIOLOGICAL MACROMOLECULES	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	12-82	1	BBCB		34,212	46,944
5	R01 GM21659-08 22400	KNOWLES, JEREMY R MECHANISMS OF ENZYME CATALYSIS	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	11-82	1	BIO		88,298	135,979
5	R01 GM21668-08 22500	HUTCHISON, CLYDE A, JR LOCAL STRUCTURE IN ENZYMES--A NEW APPROACH	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	11-82	1	BBCB		81,748	123,556
5 M	P50 GM21681-18 13300	BAXTER, CHARLES R CIRUCLATORY AND FLUID VOLUME CHANGES IN BURNS	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	11-82	1	SGYB		182,781	245,538
5 M	P50 GM21700-08 13300	BURKE, JOHN F BURN TRAUMA CENTER	MASSACHUSETTS GENERAL HOSPITAL	BOSTON	MASSACHUSETTS	82	11-82	3	SRC		426,381	576,746
5	R01 GM21703-06 11940	MUNK, MORTON E COMPUTER-ASSISTED STRUCTURE ELUCIDATION	ARIZONA STATE UNIVERSITY	TEMPE	ARIZONA	82	12-82	0	SSS		70,652	106,685
5 M	P50 GM21714-08 22300	PALADE, GEORGE E RESEARCH CENTER ON CELLULAR MEMBRANES	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	11-82	2	SSS		380,000	597,050
5	R01 GM21726-07 22500	DUS, KARL M COMPARATIVE STRUCTURAL STUDIES OF P-450 HEMEPROTEINS	ST. LOUIS UNIVERSITY	SAINT LOUIS	MISSOURI	82	03-83	0	BIO		52,153	78,230
5	R01 GM21729-23 13200	GRONERT, GERALD A METABOLIC EFFECTS OF ANESTHESIA AND SURGERY	MAYO FOUNDATION	ROCHESTER	MINNESOTA	82	11-82	2	SAT		92,416	124,979
5	R01 GM21734-08 21700	FREELING, MICHAEL DEVELOPMENTAL GENETICS WITH AN INDUCIBLE GENE SYSTEM	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	01-83	3	GEN		72,484	94,489
5	R01 GM21737-16 22450	PENEFSKY, HARVEY S MITOCHONDRIAL MEMBRANE AND OXIDATIVE PHOSPHORYLATION	PUBLIC HLTH RES INST OF THE CITY OF NY	NEW YORK	NEW YORK	82	12-82	2	BIO		93,272	129,118
5	R01 GM21747-08 21100	WRIGHT, GEORGE E DESIGN OF SELECTIVE INHIBITORS OF DNA POLYMERASES	UNIVERSITY OF MASSACHUSETTS MEDICAL SCH	WORCESTER	MASSACHUSETTS	82	12-82	1	BNP		70,383	118,251

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5	R01 GM21769-08 21320	WOOL, IRA G PROTEINS OF EUKARYOTIC RIBOSOMES	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	01-83	2	PC		122,746	192,711
2	R01 GM21782-07 21200	HINKLE, DAVID C ENZYMATIC MECHANISM OF DNA REPLICATION	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	05-83	4	BIO		65,027	110,927
2	R01 GM21783-08A1 AI 21310	MC ALLISTER, WILLIAM T REGULATION OF VIRAL GENE EXPRESSION	RUTGERS MEDICAL SCHOOL	PISCATAWAY	NEW JERSEY	82	06-83	4	MG		53,433	78,673
2	R01 GM21784-08 11920	HANZLIK, ROBERT P THE ROLE OF EPOXIDES IN METABOLISM AND DRUG TOXICITY	UNIVERSITY OF KANSAS LAWRENCE	LAWRENCE	KANSAS	82	07-83	2	TOX		67,183	89,679
5	R01 GM21788-08 21250	BOCKRATH, RICHARD C RADIATION INDUCED CELLULAR MUTAGENESIS AND DNA REPAIR	INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS	INDIANAPOLIS	INDIANA	82	01-83	1	RAD		43,403	62,060
5	R01 GM21793-08 21600	GOROVSKY, MARTIN A REPEATED GENES: ORGANIZATION, EVOLUTION AND FUNCTION	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	01-83	2	GEN		112,688	194,205
5	R01 GM21809-08 21700	KESSIN, RICHARD H CONTROL OF AGGREGATION IN D. DISCOIDEUM	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	01-83	0	GEN		60,869	93,198
5	R01 GM21812-08 21200	BLATTNER, FREDERICK R REGULATORY SITES IN PRO- AND EUKARYOTIC GENOMES	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	01-83	2	MGN		171,290	239,206
5	R01 GM21822-08 22550	VAN DER HELM, DICK STRUCTURE AND CONFORMATION OF SIDEROPHORES AND PEPTIDES	UNIVERSITY OF OKLAHOMA NORMAN	NORMAN	OKLAHOMA	82	04-83	2	BBCA		74,250	102,155
5	R01 GM21823-08 22200	HASELKORN, ROBERT DIFFERENTIATION IN NITROGEN-FIXING BLUE-GREEN ALGAE	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	04-83	0	MBY		73,964	113,375
5	R01 GM21827-08 22450	SHERMAN, LOUIS A PHOTOSYNTHESIS, MUTANTS AND CLONING IN CYANOBACTERIA	UNIVERSITY OF MISSOURI COLUMBIA	COLUMBIA	MISSOURI	82	04-83	1	MBC		69,094	92,912
5	R01 GM21839-08 21200	GRAY, HORACE B, JR NUCLEIC ACID MODIFICATION WITH SPECIFIC ENDONUCLEASES	UNIVERSITY OF HOUSTON AT HOUSTON	HOUSTON	TEXAS	82	03-83	1	BIO		59,906	77,878

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5	R01 GM21841-08 22200	THORNER, JEREMY W CELL-CELL INTERACTIONS OF A SIMPLE EUKARYOTE	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	12-82	1	GEN		85,033	111,393
2	R01 GM21842-07 22200	BRODY, STUART BIOCHEMISTRY OF CIRCADIAN RHYTHMS IN NEUROSPORA	UNIVERSITY OF CALIFORNIA	SAN DIEGO LA JOLLA	CALIFORNIA	82	11-82	2	MBC		79,962	102,125
5	R01 GM21844-06 11920	TAYLOR, LARRY T STRUCTURE AND REACTIVITY OF MANGANESE-OXYGEN COMPLEXES	VIRGINIA POLYTECHNIC INST AND ST UNIV	BLACKSBURG	VIRGINIA	81	03-83	0	BMT		31,994	45,751
5	R01 GM21846-07 21600	CHAE, CHI-BOM ROLE OF CHROMOSOMAL PROTEASE IN NUCLEAR FUNCTIONS	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	03-83	0	PBC		36,093	49,990
5	R01 GM21858-08 21250	LAWRENCE, CHRISTOPHER W RADIATION MUTAGENESIS AND REPAIR IN SACCHAROMYCES	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	01-83	3	RAD		101,624	152,436
5	R01 GM21872-08 21200	STUDIER, F WILLIAM REPLICATION OF T7 DNA	ASSOCIATED UNIV-BROOKHAVEN NATL LAB	UPTON	NEW YORK	82	01-83	0	VR		50,504	80,806
5	R01 GM21873-08 21280	EISENSTADT, JEROME M CYTOPLASMIC INHERITANCE IN CULTURED MAMMALIAN CELLS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	01-83	2	MGN		139,690	220,710
5	R01 GM21874-08 21750	PARDUE, MARY L GENE FUNCTION ANALYSIS BY POLYTENE CHROMOSOMES	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	01-83	2	GEN		99,284	155,132
2	R01 GM21875-07 22300	BROCKERHOFF, HANS ROLE OF CHOLESTEROL IN BIOLOGICAL MEMBRANES	INSTITUTE FOR BASIC RES IN DEV DISABIL	NEW YORK	NEW YORK	82	08-83	4	BBCB		68,027	105,475
5	R01 GM21882-08 11920	ETZLER, MARILYNN E STRUCTURE, DEVELOPMENT, AND MODIFICATIONS OF LECTINS	UNIVERSITY OF CALIFORNIA	DAVIS DAVIS	CALIFORNIA	82	01-83	0	PC		54,771	71,750
5	R01 GM21887-07 21780	GUILD, WALTER R PNEUMOCOCCAL PHAGE AS GENETIC TOOLS	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	06-83	1	MBC		45,194	67,191
5	R01 GM21890-06 21200	SCOCCA, JOHN J DNA INTERACTIONS IN BACTERIAL TRANSFORMATION	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	03-83	0	MBC		68,679	103,019

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5	R01 GM21891-08 21750	DAVIS, RONALD W CELL REGULATION: BIOCHEMICALLY ISOLATED DNA SEGMENTS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	02-83	0	MBY		94,771	146,838
2	R01 GM21900-07 22500	MAKINEN, MARVIN W ENZYME COMPLEXES IN CRYSTALS-A NEW APPROACH	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	03-83	2	BBCB		111,240	143,297
5	R01 GM21909-06 22300	HULETT, F MARION MEMBRANE PROTEIN-PROTEIN SECRETION STUDIES	UNIVERSITY OF ILLINOIS CHICAGO CIRCLE	CHICAGO	ILLINOIS	81	03-83	0	BIO		41,042	71,824
5	R01 GM21919-08 21600	COLEMAN, JOSEPH E STRUCTURE AND FUNCTION OF DNA BINDING PROTEINS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	05-83	0	BBCB		56,576	89,390
5	R01 GM21931-07 22250	BROKAW, CHARLES J COMPUTER SIMULATION OF SLIDING FILAMENT SYSTEMS	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	03-83	1	CBY		13,872	20,531
5	R01 GM21941-08 21750	ROBERTS, JEFFREY W GENE CONTROL IN INFECTION & LYSOGENY BY PHAGE LAMBDA	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	01-83	3	MG		104,644	145,815
5	R01 GM21948-06 21280	CUMMINGS, DONALD J REPLICATION, FUNCTION AND BIOGENESIS OF MITOCHONDRIA	UNIVERSITY OF COLORADO HLTH SCIENCES CTR	DENVER	COLORADO	81	12-82	0	CTY		70,909	90,204
5	R01 GM21953-08 22300	GLASER, MICHAEL LIPID METABOLISM AND MEMBRANE STRUCTURE AND FUNCTION	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	12-82	3	CTY		79,459	112,598
5	R01 GM21960-08 21200	HUANG, WAI M DNA INITIATION AND REPLICATION	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	03-83	1	MG		67,255	96,620
5	R01 GM21966-08 21100	CROTHERS, DONALD M THE PHYSICAL BASIS FOR MOLECULAR GENETIC PHENOMENA	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	01-83	1	BBCA		73,547	115,044
5	R01 GM21967-08 22550	MATTHEWS, BRIAN W STRUCTURE, FUNCTION AND STABILITY OF T4 PHAGE LYSOZYME	UNIVERSITY OF OREGON	EUGENE	OREGON	82	05-83	3	BBCB		85,720	115,133
2	R01 GM21971-08 22300	KREIBICH, GERT ORGANIZATION AND BIOSYNTHESIS OF ER MEMBRANE PROTEINS	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82	01-83	4	MBY		113,935	164,447

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5	R01 GM21975-06 21320	CASJENS, SHERWOOD R BACTERIOPHAGE P22 ASSEMBLY AND ITS GENETIC CONTROL	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	81	10-82	0	VR		33,665	48,548
5	R01 GM21978-06 21200	ZYSKIND, JUDITH W DNA INITIATION AND TERMINATION IN BACTERIA	UNIVERSITY OF CALIFORNIA	SAN DIEGO LA JOLLA	CALIFORNIA	81	09-82	0	MBY		53,012	69,446
5	R01 GM21993-07 13700	LYNCH, CAROL B GENETIC ANALYSIS OF BEHAVIORAL THERMOREGULATION	WESLEYAN UNIVERSITY	MIDDLETOWN	CONNECTICUT	81	03-83	0	GEN		49,760	69,907
3	R01 GM21993-07S1 13700	LYNCH, CAROL B GENETIC ANALYSIS OF BEHAVIORAL THERMOREGULATION	WESLEYAN UNIVERSITY	MIDDLETOWN	CONNECTICUT	82	03-83	0	GEN		22,083	36,063
5	R01 GM21998-08 21100	HALEY, BOYD E APPLICATION OF PHOTOAFFINITY NUCLEOTIDE ANALOGS	UNIVERSITY OF WYOMING	LARAMIE	WYOMING	82	02-83	3	PC		76,615	105,715
5	R01 GM21999-06 21320	WIBERG, JOHN S REGULATION OF PROTEIN SYNTHESIS BY BACTERIOPHAGE T4	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	11-82	2	VR		85,943	141,806
5	R01 GM22007-08 21780	OHTSUBO, EIICHI STRUCTURE AND FUNCTION OF INSERTION AND TN ELEMENTS	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	01-83	3	MG		104,704	152,033
5	R01 GM22023-06 12500	COOPER, JEFFREY B NEW APPROACHES TO ANESTHESIA MANAGEMENT	MASSACHUSETTS GENERAL HOSPITAL	BOSTON	MASSACHUSETTS	81	09-82	0	SGYA		86,757	119,495
5	R01 GM22028-08 22600	PARR, ROBERT G THE QUANTUM THEORY OF MOLECULAR ISOELECTRONIC CHANGES	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	02-83	2	BBCA		45,420	63,406
5	R01 GM22029-09 21100	WETMUR, JAMES G RENATURATION AND HYBRIDIZATION OF NUCLEIC ACIDS	MOUNT SINAI SCHOOL OF MEDICINE	NEW YORK	NEW YORK	82	08-83	0	BBCA		46,300	68,007
5	R01 GM22030-07 21320	TAI, PHANG-CHENG THE FUNCTIONS OF RIBOSOME RELEASE FACTOR	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	06-83	1	MBC		38,825	76,019
5	R01 GM22057-08 22300	KENNEDY, EUGENE P BIOGENESIS AND FUNCTION OF MEMBRANES	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	04-83	2	MBC		83,821	161,803

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5	R01 GM22070-08 22450	FISHER, RONALD R MITOCHONDRIAL PYRIDINE DINUCLEOTIDE TRANSHYDROGENASE	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA	COLUMBIA	SOUTH CAROLINA	82	07-83	3	PB		82,163	118,091
5	R01 GM22079-08 21320	GUPTA, NABA K PROTEIN SYNTHESIS INITIATION IN RED BLOOD CELLS	UNIVERSITY OF NEBRASKA LINCOLN	LINCOLN	NEBRASKA	82	04-83	3	BIO		65,205	89,983
5	R01 GM22086-08 22300	NAIDER, FRED R PEPTIDE-CELL INTERACTIONS IN SACCHAROMYCES CEREVISIAE	COLLEGE OF STATEN ISLD ST. GEORGE CAMPUS	NEW YORK	NEW YORK	82	04-83	1	PB		46,516	72,882
5	R01 GM22087-08 22300	BECKER, JEFFREY M PEPTIDE-CELL INTERACTIONS IN SACCHAROMYCES CEREVISIAE	UNIVERSITY OF TENNESSEE KNOXVILLE	KNOXVILLE	TENNESSEE	82	04-83	1	PB		48,943	70,607
2	R01 GM22092-07 21200	KOGOMA, TOKIO DNA REPLICATION IN E. COLI: REGULATORY MUTANTS	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	ALBUQUERQUE	NEW MEXICO	82	02-83	2	MG		61,040	83,625
2	R01 GM22109-07 22500	STELLWAGEN, EARLE C AFFINITY CHROMATOGRAPHY FOR THE DINUCLEOTIDE FOLD	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	03-83	4	BBCA		70,830	92,805
5	R01 GM22113-06 13200	KENDIG, JOAN J MECHANISM OF LOCAL ANESTHETIC CONDUCTION BLOCK	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	03-83	0	SAT		42,413	67,013
2	R01 GM22125-07 22400	WHITELEY, JOHN M PTERIDINE DEPENDENT HYDROXYLASE FROM LIVER AND BRAIN	SCRIPPS CLINIC AND RESEARCH FOUNDATION	LA JOLLA	CALIFORNIA	82	03-83	4	PC		84,442	125,665
2	R01 GM22127-07A1 21750	WEAVER, ROBERT F TRANSCRIPTION CONTROL IN NUCLEAR POLYHEDROSIS VIRUS	UNIVERSITY OF KANSAS LAWRENCE	LAWRENCE	KANSAS	82	06-83	2	BIO	1	27,138	33,935
5	R01 GM22130-08 22400	BRILL, WINSTON J MOLYBDENUM METABOLISM	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	07-83	0	MBC		64,158	91,746
2	R01 GM22131-08 21750	SOMERVILLE, RONALD L REGULATORY MECHANISMS IN TRYPTOPHAN BIOSYNTHESIS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	06-83	2	MBC		91,475	122,806
5	R01 GM22135-08 21320	HERSHEY, JOHN W MECHANISM OF INITIATION OF PROTEIN BIOSYNTHESIS	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	07-83	0	CTY		92,836	127,000

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5	R01 GM22138-08 21600	BLUMENFELD, MARTIN S SATELLITE DNA AND MOLECULAR ORGANIZATION OF CHROMOSOMES	UNIVERSITY OF MINNESOTA	OF MNPLS-ST PAUL MINNEAPOLIS	MINNESOTA	82	12-82	1	GEN	76,223	101,755
5	R01 GM22150-08 21320	KAHAN, LAWRENCE IMMUNOCHEMICAL ANALYSIS OF 30S RIBOSOME STRUCTURE	UNIVERSITY OF WISCONSIN	MADISON MADISON	WISCONSIN	82	04-83	0	PC	47,300	65,591
5	P01 GM22167-08 21400	WITKOP, CARL J, JR ALBINISM	UNIVERSITY OF MINNESOTA	OF MNPLS-ST PAUL MINNEAPOLIS	MINNESOTA	82	08-83	0	SSS	160,290	222,803
5	R01 GM22172-08 11910	CANE, DAVID E BIOSYNTHESIS OF ANTIBIOTIC NATURAL PRODUCTS	BROWN UNIVERSITY	PROVIDENCE	RHODE ISLAND	82	07-83	0	BNP	66,700	109,405
5	R01 GM22175-07 22300	DAWIDOWICZ, ELIEZAR A PHYSICAL STUDY OF LIPID MOTION IN RED CELL MEMBRANES	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	03-83	1	BBCB	65,794	128,825
2	R01 GM22199-07 21200	AGARWAL, KAN L DNA-PROTEIN INTERACTION	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	03-83	3	PC	73,920	113,774
5	R01 GM22200-08 21310	BRUENN, JEREMY A SEQUENCING OF YEAST KILLER-FACTOR RNAS	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	82	04-83	2	MBC	59,439	88,624
5	R01 GM22201-08 21600	GARRARD, WILLIAM T STRUCTURE OF THE SUBUNITS OF EUKARYOTIC CHROMOSOMES	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	04-83	0	CTY	57,000	75,283
5	R01 GM22209-08 11880	BLASCHKE, TERRENCE F KINETICS OF DRUG-DRUG AND DRUG-DISEASE INTERACTIONS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	08-83	1	PHRA	71,092	120,145
2	R01 GM22214-07 22250	OLMSTED, JOANNA B CELLULAR CONTROL OF NEURONAL CYTOSKELETON ASSEMBLY	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	02-83	4	MBY	83,117	133,154
2	P01 GM22220-06 11700	GOLDBERG, LEON I CLINICAL PHARMACOLOGY CENTER	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	11-82	2	PTR	229,471	351,662
5	P01 GM22221-08 21700	GREEN, MELVIN M GENETIC AND EVOLUTIONARY STUDIES WITH DROSOPHILA	UNIVERSITY OF CALIFORNIA	DAVIS DAVIS	CALIFORNIA	82	07-83	2	SSS	340,545	460,217

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5	R01 GM22232-08 21200	CARROLL, DANA DEVELOPMENTAL CONTROL AND EVOLUTION OF 5S RNA GENES	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	05-83	1	GEN		80,891	115,762
5	R01 GM22238-06 21200	FRALICK, JOE A CHROMOSOME REPLICATION IN ESCHERICHIA COLI	TEXAS TECH UNIVERSITY	LUBBOCK	TEXAS	82	08-83	0	MBC		33,837	43,388
2	R01 GM22240-07 22300	WISNIESKI, BERNADINE J PHYSICAL STRUCTURE OF ANIMAL CELL MEMBRANES	UNIVERSITY OF CALIFORNIA	LOS ANGELES LOS ANGELES	CALIFORNIA	82	11-82	4	BBCB		82,635	102,108
2	R01 GM22243-07A1 22500	COX, DAVID J SELF-ASSOCIATION REACTIONS OF MACROMOLECULES	KANSAS STATE UNIVERSITY	MANHATTAN	KANSAS	82	07-83	2	BBCB		43,987	55,980
5	R01 GM22247-06 22300	BERNS, DONALD S PHOTOSENSITIVE MODEL MEMBRANE STUDIES	NEW YORK STATE DEPARTMENT OF HEALTH	ALBANY	NEW YORK	80	10-82	0	BBCB		36,533	57,255
5	R01 GM22261-08 22500	LIGHT, ALBERT BOVINE ENTEROKINASE STRUCTURE AND FUNCTION	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	04-83	0	PC		50,277	68,263
5	R01 GM22274-08 21750	MESELSON, MATTHEW S NUCLEAR AND MESSENGER RNA OF DROSOPHILA	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	06-83	2	GEN		178,328	273,549
2	R01 GM22289-08 22250	LIN, SHIN CYTOCHALASINS, ACTIN FILAMENTS, AND CELL MOTILITY	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	04-83	4	CTY		111,952	159,878
5	R01 GM22299-08 21700	NEWTON, AUSTIN REGULATION OF DEVELOPMENT IN CAULOBACTER CRESCENTUS	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	08-83	3	MBC		82,214	134,831
5	R01 GM22300-08 22400	BOLEN, DAVID W ELEMENTARY STEPS IN ENZYME CATALYSIS	SOUTHERN ILLINOIS UNIVERSITY CARBONDALE	CARBONDALE	ILLINOIS	82	08-83	1	PB		40,250	58,354
5	R01 GM22311-07 12820	CHRISTIAN, GARY D CARCINOGEN DETECTION IN HUMANS BY VIDEO FLUOROMETRY	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	08-83	1	BMT		62,317	83,505
5	R01 GM22323-08 22300	EPSTEIN, WOLFGANG BIOCHEMICAL STUDIES OF ATP-DRIVEN BACTERIAL TRANSPORT	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	08-83	2	MBC		67,017	111,189

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5	R01 GM22328-07 22300	TOBACK, FREDERICK G MEMBRANES AND PHOSPHOLIPIDS IN RENAL HYPERPLASIA	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	81	03-83	0	PTHA		96,540	153,294
3	R01 GM22328-07S1 22300	TOBACK, FREDERICK G MEMBRANES AND PHOSPHOLIPIDS IN RENAL HYPERPLASIA	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	03-83	0	PTHA		55,035	93,009
2	R01 GM22332-06A1 CA 21200	SCHILDKRAUT, CARL L DNA OF NORMAL AND MALIGNANT CELLS	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	11-82	4	MBY		86,832	160,132
2	R01 GM22333-16 21280	SIMPSON, MELVIN V MITOCHONDRIA: NUCLEIC ACID SYNTHESIS AND ROLE OF DNA	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	06-83	2	BIO		60,798	89,430
5	R01 GM22338-06 12910	GREENFIELD, MOSES A IN VIVO BONE STUDY USING ULTRASOUND/PHOTON ABSORPTION	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	11-82	0	RNM		25,181	32,987
2	R01 GM22341-07 21700	KAUFFMAN, STUART A SEQUENTIAL DEVELOPMENTAL COMMITMENTS IN DROSOPHILA	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	05-83	2	GEN		83,508	135,058
2	R01 GM22346-06 11940	GASSMAN, PAUL G STEREOSPECIFIC FUNCTIONALIZATION OF AROMATIC AMINES	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	11-82	1	MCHA		44,945	61,125
2	R01 GM22350-07 22400	GERLT, JOHN A ENZYMOLOGY OF PHOSPHORUS METABOLISM	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	06-83	2	BIO	1	80,549	122,198
5	R01 GM22359-07 21600	BASERGA, RENATO L CHROMOSOMAL PROTEINS IN CELL PROLIFERATION	TEMPLE UNIVERSITY	PHILADELPHIA	PENNSYLVANIA	82	02-83	1	PTHB		48,386	74,031
2	P01 GM22365-06A1 11900	LONG, JOHN P STRUCTURE ACTIVITY STUDIES OF PHARMACOLOGIC AGENTS	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	04-83	2	PTR		270,000	363,480
2	R01 GM22369-07 11750	JACKSON, MICHAEL J DRUG TRANSPORT IN THE GI TRACT AND OTHER EPITHELIA	GEORGE WASHINGTON UNIVERSITY	WASHINGTON	DIST OF COL	82	06-83	4	PHRA		66,645	105,417
2	P01 GM22371-07 11700	ATKINSON, ARTHUR J, JR CLINICAL PHARMACOLOGY OF COMMONLY USED DRUGS	NORTHWESTERN UNIVERSITY	CHICAGO	ILLINOIS	82	03-83	2	PTR		137,109	189,210

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2	R01 GM22387-07 21700	HERMAN, ROBERT K DEVELOPMENTAL GENETICS OF CAENORHABDITIS ELEGANS	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	02-83	4	SSS		55,902	75,127
5	R01 GM22395-08 21750	BROWN, DONALD D THE DUAL 5S RNA GENE SYSTEM IN XENOPUS	CARNEGIE INSTITUTION OF WASHINGTON D C	BALTIMORE	MARYLAND	82	08-83	2	GEN		123,513	192,296
5	R01 GM22407-06 22250	REBHUN, LIONEL I CONTROL OF SULFHYDRYLS OF TUBULIN AND OTHER PROTEINS	UNIVERSITY OF VIRGINIA	CHARLOTTESVILLE	VIRGINIA	81	12-82	0	MBY		51,327	74,424
5	R01 GM22427-07 22400	LOEWUS, FRANK A INOSITOL METABOLISM	WASHINGTON STATE UNIVERSITY	PULLMAN	WASHINGTON	81	02-83	0	BIO		80,786	117,140
5	R01 GM22430-06 22400	HUANG, CHING-HSIEN PROTEIN KINASE--STRUCTURE AND BIOLOGICAL ACTIVITY	UNIVERSITY OF VIRGINIA	CHARLOTTESVILLE	VIRGINIA	82	06-83	0	PBC		76,448	109,787
5	R01 GM22432-08 22300	CHAN, SUNNEY I STUDIES OF LIPID-LIPID AND LIPID-PROTEIN INTERACTIONS	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	08-83	2	BBCB		144,121	211,379
5	R01 GM22434-06 22400	ANDERSON, PAUL M CYNATE--REACTION WITH CYANASE & AMIDOTRANSFERASE	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	03-84	0	BIO		30,450	41,412
2	R01 GM22441-07 21310	MATTHEWS, KATHLEEN S FLUORESCENCE AND PHYSICAL STUDIES OF REPRESSOR PROTEINS	RICE UNIVERSITY	HOUSTON	TEXAS	82	03-83	4	BBCA		62,555	84,960
5	R01 GM22466-07 22400	MUNN, WILLIAM D CONTROL OF LIPID METABOLISM IN ESCHERICHIA COLI	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	07-83	1	MBC		51,596	71,353
3	R01 GM22466-07S1 22400	MUNN, WILLIAM D CONTROL OF LIPID METABOLISM IN ESCHERICHIA COLI	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	07-83	1	MBC		26,505	36,974
2	R01 GM22479-07 11940	VOLLHARDT, K PETER NOVEL ROUTES TO PHYSIOLOGICALLY ACTIVE COMPOUNDS	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	03-83	4	BMT		69,424	88,093
5	R01 GM22488-06 21320	RUSSELL, PETER J A RIBOSOME BIOSYNTHESIS MUTANT OF NEUROSPORA	REED COLLEGE	PORTLAND	OREGON	82	06-83	1	MBY		41,712	57,759

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2	R01 GM22498-07 22550	KARTHA, GOPINATH CYCLIC PEPTIDES, STRUCTURE AND FUNCTION	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	08-83 47,980	2	BBCA 68,132	
2	R01 GM22497-07 22250	SHERLINE, PETER REGULATION OF MICROTUBULE ASSEMBLY IN VIVO	UNIVERSITY OF CONNECTICUT HEALTH CENTER	FARMINGTON	CONNECTICUT	82	08-83 70,545	2	CBY 96,733	
5	R01 GM22500-07 22200	LERNER, RICHARD A THE CELLULAR SLIME MOLD AS A MODEL FOR HUMAN DEVELOPMENT	SCRIPPS CLINIC AND RESEARCH FOUNDATION	LA JOLLA	CALIFORNIA	82	04-83 86,400	1	CBY 142,474	
5	R01 GM22517-07 12840	PECORA, ROBERT DYNAMIC LIGHT SCATTERING FROM BIOLOGICAL SYSTEMS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	03-83 41,283	0	BBCB 60,864	
2	R01 GM22523-07 21800	WADE, MICHAEL J GENETICAL CONSEQUENCES OF EXTINCTION DISPERSION	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	08-83 41,413	2	GEN 63,478	
5	R01 GM22525-07 21280	BUTOW, RONALD A REGULATION OF MITOCHONDRIAL BIOGENESIS IN YEAST	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	04-83 55,166	1	MBY 74,750	
5	R01 GM22548-20 11870	CRAVEN, BRYAN M CHARGE DENSITY IN BARBITURATE CRYSTAL STRUCTURES	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	81	12-82 35,369	0	BBCA 53,501	
5	R01 GM22556-07 22450	YASUNOBU, KERRY T CYTOCHROME OXIDASE AND CYTOCHROME P-450 STRUCTURES	UNIVERSITY OF HAWAII AT MANOA	HONOLULU	HAWAII	82	06-83 69,668	1	PB 97,676	
5	R01 GM22562-06 21200	COSLOY, SHARON D MOLECULAR MECHANISM OF RECOMBINATION OF E COLI K12	CITY COLLEGE OF NEW YORK	NEW YORK	NEW YORK	82	11-82 39,894	0	MBC 64,110	
5	R01 GM22566-07 11920	ZUBIETA, JON A MOLYBDENUM & SULFUR COMPLEXES--MODELS FOR METALLOENZYMES	STATE UNIVERSITY OF NEW YORK AT ALBANY	ALBANY	NEW YORK	82	06-83 34,056	0	BMT 49,177	
5	R01 GM22579-08 22400	WOOD, HARLAND G SUBUNIT-SUBUNIT INTERACTIONS OF TRANSCARBOXYLASE	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	82	08-83 128,474	2	BIO 187,541	
2	R01 GM22580-07 21750	PAULE, MARVIN R GENE SELECTION BY MULTIPLE EUKARYOTIC RNA POLYMERASES	COLORADO STATE UNIVERSITY	FORT COLLINS	COLORADO	82	03-83 82,893	2	PBC 103,400	

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2	R01 GM22586-07 21200	HAYS, JOHN B DNA STRUCTURES WHICH STIMULATE GENETIC RECOMBINATION	UNIVERSITY OF MARYLAND BALT CO CAMPUS	CATONSVILLE	MARYLAND	82	08-83	4	MG		109,593	149,796
2	R01 GM22597-07 21280	VAN TUYLE, GLENN C PACKAGING AND REPLICATION OF MITOCHONDRIAL DNA	VIRGINIA COMMONWEALTH UNIVERSITY	RICHMOND	VIRGINIA	82	03-83	2	MBY		63,363	89,837
5	R01 GM22619-07 21750	KRAKOW, JOSEPH S STUDIES ON THE CYCLIC AMP RECEPTOR PROTEIN OF E. COLI	HUNTER COLLEGE	NEW YORK	NEW YORK	82	03-83	2	MBC		51,646	83,615
5	R01 GM22620-06 22300	ALLERHAND, ADAM CARBON-13 NMR STUDIES OF SPECIFIC SITES IN PROTEINS	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	81	02-83	0	BBCA		50,618	68,911
2	R01 GM22623-07 21750	LU, PONZY SPECIFIC PROTEIN-DNA COMPLEXES: STRUCTURE AND DYNAMICS	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	02-83	4	BBCB		88,371	135,185
5	R01 GM22629-08 21480	CHASIN, LAWRENCE A FINE STRUCTURE MAPPING OF MUTATIONS IN MAMMALIAN CELLS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	08-83	1	MGN		111,260	188,808
5	R01 GM22663-08 22550	REEKE, GEORGE N, JR COMPUTING METHODS FOR MACROMOLECULAR CYSTALLOGRAPHY	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	08-83	1	BBCB		43,600	67,198
5	R01 GM22679-07 12820	BROWN, HARRY D MICROCALORIMETRIC DEFINITION OF CLINICAL REACTIONS	RUTGERS THE STATE UNIV NEW BRUNSWICK	NEW BRUNSWICK	NEW JERSEY	81	03-83	0	BBCA		48,874	73,944
5	R01 GM22680-08 12910	MILLER, MORTON W BIOPHYSICAL BASES OF PULSED ULTRASOUND BIOEFFECTS	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	04-83	2	RNM		88,782	154,481
5	R01 GM22688-06 11760	KUPFER, DAVID PROSTAGLANDINS: INTERACTIONS WITH MONOOXYGENASES	WORCESTER FDN FOR EXPER BIOLOGY	SHREWSBURY	MASSACHUSETTS	81	03-83	0	PHRA		63,467	97,446
5	R01 GM22701-07 22500	MUNCK, ECKARD STUDIES OF O2 ACTIVATION BY MOSSBAUER SPECTROSCOPY	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	02-83	3	BBCB		48,450	65,208
5	R01 GM22714-08 22300	KUNG, CHING GENETIC AND BIOCHEMICAL STUDIES OF PARAMECIUM BEHAVIOR	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	04-83	2	GEN		146,338	204,324

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5	R01 GM22728-07 22600	RICE, STUART A WATER: EXPERIMENTAL AND THEORETICAL STUDIES	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	02-83	0	BBCB		63,050	89,869
2	R01 GM22731-07 21700	STREISINGER, GEORGE GENETIC STUDIES WITH ZEBRA FISH (BRACHYDANIO RERIO)	UNIVERSITY OF OREGON	EUGENE	OREGON	82	02-83	4	GEN		154,759	205,479
5	R01 GM22733-07 21320	SCANDALIOS, JOHN G CONTROL OF GENE EXPRESSION IN EUKARYOTE DEVELOPMENT	NORTH CAROLINA STATE UNIVERSITY RALEIGH	RALEIGH	NORTH CAROLINA	82	07-83	1	GEN		47,142	65,999
5	R01 GM22737-04 11910	OLIVERA, BALDOMERO M A BIOCHEMICAL CHARACTERIZATION OF CONUS TOXINS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	81	03-83	0	PC		56,555	82,948
5	R01 GM22744-07 11910	GURIN, SAMUEL BIOSYNTHESIS AND FUNCTION OF PYRIDINE CARBOXYLIC ACIDS	UNIVERSITY OF FLORIDA	GAINESVILLE	FLORIDA	82	03-83	0	BIO		23,597	30,908
2	R01 GM22746-07 13200	MAZZE, RICHARD I NEPHROTOXICITY OF FLUORINATED ANESTHETICS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	2	SAT		44,444	64,444
2	R01 GM22749-07 21750	DICKSON, ROBERT C EUCARYOTIC ENZYME INDUCTION: B-GALACTOSIDASE IN YEAST	UNIVERSITY OF KENTUCKY	LEXINGTON	KENTUCKY	82	03-83	4	BIO		92,496	126,070
5	R01 GM22751-05 22450	LEE, CHUAN-PU SUBCELLULAR RESPIRATORY FUNCTIONS OF CARDIAC MUSCLE	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	81	03-83	0	BIO		67,113	98,291
5	R01 GM22759-05 22300	BOLENDER, ROBERT P ANALYTICAL MORPHOLOGY AND BIOCHEMISTRY OF HEPATOCYTES	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	04-83	3	CTY		48,221	64,568
5	R01 GM22760-07 11940	COHEN, THEODORE NEW METHODS FOR SYNTHESIS AND MODIFICATION OF RINGS	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	08-83	1	MCHA		69,068	104,983
5	R01 GM22761-06 11920	SAWYER, DONALD T THE CHEMISTRY OF BIOLOGICAL MANGANESE	UNIVERSITY OF CALIFORNIA RIVERSIDE	RIVERSIDE	CALIFORNIA	82	11-82	0	BMT		47,996	62,410
2	R01 GM22764-07 22500	MC MILLIN, DAVID R COPPER PROTEINS: ASPECTS OF STRUCTURE AND DYNAMICS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	08-83	2	BMT		81,890	103,540

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2	R01 GM22766-07 AI 21750	BROWN, RONALD D GENERATION OF ANTIBODY DIVERSITY DURING DEVELOPMENT	UNIVERSITY OF CINCINNATI	CINCINNATI	OHIO	82	03-83	2	ALY	84,042	113,659
5	R01 GM22767-06 21700	YAFFE, DAVID CONTROL OF DIFFERENTIATION IN ESTABLISHED CELL LINES	WEIZMANN INSTITUTE OF SCIENCE	REHOVOT	ISRAEL	82	12-82	0	CTY	48,801	48,801
5	P01 GM22778-07 22550	RICHARDS, FREDERIC M PROGRAM IN MACROMOLECULAR STRUCTURE, MOTION, CONTROL	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83	3	SSS	438,140	687,621
3	P01 GM22778-07S1 22550	RICHARDS, FREDERIC M NIGMS SHARED INSTRUMENTATION GRANT	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83	0	SSS	183,400	183,400
5	R01 GM22787-06 11940	VOUROS, PAUL MASS SPECTROMETRY OF BIOLOGICALLY SIGNIFICANT COMPOUNDS	NORTHEASTERN UNIVERSITY	BOSTON	MASSACHUSETTS	81	03-83	0	BMT	51,700	76,322
5	R01 GM22792-06 22400	RUBIN, CHARLES S CYCLIC AMP AND PROTEIN KINASES IN CELL REGULATION	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	03-83	2	BIO	71,773	132,208
5	R01 GM22793-07 22500	KREILICK, ROBERT W STRUCTURAL STUDIES OF BIOLOGICAL METAL COMPLEXES	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	03-83	2	BMT	79,140	130,526
2	R01 GM22807-07 21320	ZIMMERMANN, ROBERT A PHOTOCHEMICAL PROBES OF RIBOSOME ARCHITECTURE	UNIVERSITY OF MASSACHUSETTS AMHERST	AMHERST	MASSACHUSETTS	82	03-83	3	BBCA	78,188	110,202
5	R01 GM22825-06 13420	TURINSKY, JIRI MECHANISM OF INSULIN RESISTANCE AFTER BURNS	ALBANY MEDICAL COLLEGE	ALBANY	NEW YORK	81	02-83	0	MET	43,605	64,535
5	R01 GM22827-06 21100	BLAKE, RICHARD D STRUCTURE AND INTERACTIONS OF DNA	UNIVERSITY OF MAINE AT ORONO	ORONO	MAINE	82	06-83	0	BBCA	32,197	46,239
5	R01 GM22830-07 21750	PLATT, TERRY REGULATORY SEQUENCES IN TRP OPERON MRNA OF E COLI	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	02-83	1	MBC	111,973	176,917
5	R01 GM22846-08 21200	GROSSMAN, LAWRENCE ENZYMATIC EXCISION AND REPAIR MECHANISM	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	08-83	1	PC	69,097	103,646

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5	R01 GM22854-07 21320	SOLL, DIETER G TRANSFER RNA	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	02-83	3	BIO		205,704	314,838
5	R01 GM22870-06 21100	BENDICH, ARNOLD J REPEATED DNA SEQUENCES AND LAND	UNIVERSITY OF WASHINGTON PLANT EVOLUTION	SEATTLE	WASHINGTON	81	11-82	0	GEN		71,556	95,375
2	R01 GM22873-08 21100	BARKLEY, MARY D PHYSICAL STUDIES OF PROTEIN-DNA	UNIVERSITY OF KENTUCKY INTERACTIONS	LEXINGTON	KENTUCKY	82	08-83	2	BBCA		69,494	101,307
5	R01 GM22874-08 21280	SAGER, RUTH CYTOPLASMIC GENETIC CONTROL SYSTEMS	SIDNEY FARBER CANCER INSTITUTE	BOSTON	MASSACHUSETTS	82	06-83	3	MBY		107,193	182,134
2	R01 GM22877-07 21750	SUSSKIND, MIRIAM M INTERACTING REGULATORS OF GENE EXPRESSION	UNIVERSITY OF MASSACHUSETTS MEDICAL SCH	WORCESTER	MASSACHUSETTS	82	03-83	4	MG		75,525	124,823
5	R01 GM22878-07 21700	BAILEY, DONALD W GENETIC STABILITY OF MOUSE ZYGOTES IN FROZEN STORAGE	JACKSON LABORATORY	BAR HARBOR	MAINE	82	03-83	3	MGN		92,033	129,099
5	R01 GM22897-06 21750	LINDELL, THOMAS J CHARACTERIZATION OF NUCLEAR ENZYMOLOGY IN SITU	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	03-83	0	MBY		37,922	54,228
5	R01 GM22900-07 22300	CHEN, HARRY W CHOLESTEROL IN MEMBRANE FUNCTION AND CELL TRANSFORMATION	JACKSON LABORATORY	BAR HARBOR	MAINE	82	03-83	1	MBY		81,135	130,968
5	R01 GM22912-06 22300	STAEHELIN, L ANDREW ADHESIVE INTERACTIONS BETWEEN MEMBRANES	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	06-83	2	CTY		53,826	74,584
2	R01 GM22916-07 21600	VAN HOLDE, KENSAL E SUBUNIT STRUCTURE OF CHROMATIN	OREGON STATE UNIVERSITY	CORVALLIS	OREGON	82	03-83	2	MBY		78,540	99,104
5	R01 GM22923-07 22500	HYDE, JAMES S NITROXIDE RADICAL SPIN LABEL METHODS	MEDICAL COLLEGE OF WISCONSIN	MILWAUKEE	WISCONSIN	82	02-83	1	BBCB		68,100	99,698
5	R01 GM22933-05 22400	VAN ETTEN, ROBERT L THE ANOMALOUS KINETICS OF ARYL SULFATASE A	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	12-82	3	BIO		72,864	102,010

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2	R01 GM22937-07 22600	DAVIDSON, ERNEST R EXCITED STATES OF BIOMOLECULES	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	06-83	2	BBCA		55,960	74,986
2	R01 GM22939-07 21100	TURNER, DOUGLAS H KINETIC AND SPECTROSCOPIC STUDIES OF NUCLEIC ACIDS	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	02-83	4	BBCA		125,306	165,492
2	R01 GM22940-07 12820	NGUYEN-HUU, X AUTOMATIC ANALYSIS OF 2-DIMENSIONAL ELECTROPHEROGRAMS	UNIVERSITY OF CALIFORNIA SAN DIEGO LA JOLLA		CALIFORNIA	82	07-83	2	SSS	1	97,250	120,337
5	R01 GM22942-07 22300	PAGANO, RICHARD E CELL SURFACE LIPIDS: ORGANIZATION; DYNAMICS; METABOLISM	CARNEGIE INSTITUTION OF WASHINGTON D C	BALTIMORE	MARYLAND	82	02-83	1	MBY		62,966	105,471
5	R01 GM22951-07 21750	SUEOKA, NOBORU GENE EXPRESSION IN NERVOUS VS OTHER TISSUES	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	06-83	0	CTY		93,972	125,053
5	R01 GM22952-06 12400	JANATA, JIRI CHEMICALLY SENSITIVE FIELD EFFECT TRANSISTORS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	03-83	1	SB		67,900	98,455
5	R01 GM22961-06 22300	KNOWLES, JEREMY R TRANSPORT ACROSS BIOLOGICAL MEMBRANES	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	11-82	3	MBC		53,175	81,890
5	R01 GM22962-05 21320	WONG, KIN-PING RIBOSOMAL PROTEINS, PROTEIN-RNA INTERACTION & FUNCTION	UNIVERSITY OF KANSAS COL HLTH SCI & HOSP	KANSAS CITY	KANSAS	81	12-82	0	BBCA		48,350	64,399
5	R01 GM22968-07 21280	SURZYCKI, STEFAN J TRANSCRIPTION OF CHLOROPLAST DNA OF C. REINHARDI	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	82	07-83	0	GEN		47,281	68,557
5	R01 GM22969-07 21100	KEARNS, DAVID R STRUCTURAL STUDIES OF RNA	UNIVERSITY OF CALIFORNIA SAN DIEGO LA JOLLA		CALIFORNIA	82	11-82	0	BBCA		70,187	90,395
2	R01 GM22982-07 22400	OPPENHEIMER, NORMAN J STRUCTURE/FUNCTION RELATIONS IN PYRIDINE COENZYMES	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	04-83	4	BIO		84,759	109,579
2	R01 GM22988-07 11770	GRUNEWALD, GARY L CONFORMATIONALLY DEFINED ADRENERGIC AMINES	UNIVERSITY OF KANSAS LAWRENCE	LAWRENCE	KANSAS	82	06-83	2	BNP		44,612	60,235

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5	R01 GM22994-07 22500	WOODY, ROBERT W OPTICAL PROPERTIES OF BIOLOGICAL MACROMOLECULES	COLORADO STATE UNIVERSITY	FORT COLLINS	COLORADO	82	11-82	0	BBCA		61,550	82,969
5	R01 GM22995-06 11940	SHEA, KENNETH J TEMPLATE SYNTHESIS OF MACROMOLECULES	UNIVERSITY OF CALIFORNIA	IRVINE IRVINE	CALIFORNIA	82	05-83	0	MCHA		39,066	51,176
5	R01 GM22996-07 22300	LIENHARD, GUSTAV E THE GLUCOSE TRANSPORT SYSTEM OF THE HUMAN ERYTHROCYTE	DARTMOUTH COLLEGE	HANOVER	NEW HAMPSHIRE	82	08-83	1	PBC		60,187	89,378
5	R01 GM23000-07 13420	SHIRES, GEORGE T EVALUATION OF SALINE SOLUTIONS IN THERAPY OF SHOCK	CORNELL UNIVERSITY MEDICAL CENTER	NEW YORK	NEW YORK	82	06-83	3	SAT		81,114	119,333
5	R01 GM23006-23 22450	MACKLER, BRUCE STUDIES OF BIOLOGICAL OXIDATIONS	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	08-83	3	PB		92,598	124,081
5	R01 GM23007-05 21800	THROCKMORTON, LYNN H PROTEIN DIFFERENTIATION IN DROSOPHILA	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	80	03-83	0	GEN		88,263	132,812
3	R01 GM23007-05S1 21800	THROCKMORTON, LYNN H PROTEIN DIFFERENTIATION IN DROSOPHILA	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	81	03-83	0	GEN		6,902	12,216
2	R01 GM23013-05A1 21320	ROUFA, DONALD J GENETICS OF THE MAMMALIAN 80S RIBOSOME	KANSAS STATE UNIVERSITY	MANHATTAN	KANSAS	82	07-83	2	MGN		65,750	85,939
5	R01 GM23016-07 21200	EPSTEIN, WOLFGANG FUNCTION OF THE RECA PROTEIN OF E. COLI	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	08-83	0	MG		36,713	58,015
5	R01 GM23028-06 22400	BUTLER, LARRY G RELATIONSHIPS OF PHOSPHOMONO- AND PHOSPHODIESTERASES	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	06-83	2	BIO		56,707	76,766
5	R01 GM23029-06 13200	KAMINSKY, LAURENCE S HEPATIC MICROSOMAL ENZYME METABOLISM OF ANESTHETICS	NEW YORK STATE DEPARTMENT OF HEALTH	ALBANY	NEW YORK	81	03-83	0	PHRA		31,502	45,031
5	R01 GM23030-07 21600	KRUEGER, ROBERT C STRUCTURE AND TEMPLATE ACTIVITY OF CHROMATIN	UNIVERSITY OF CINCINNATI	CINCINNATI	OHIO	82	06-83	1	PBC		33,794	47,312

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5	R01 GM23037-05 21320	AGRIS, PAUL F TRANSFER RNA STRUCTURE DURING PROTEIN SYNTHESIS	UNIVERSITY OF MISSOURI COLUMBIA	COLUMBIA	MISSOURI	82	03-83	0	BBCA		36,211	49,066
2	R01 GM23039-06 22500	DAVIS, LAWRENCE C DIRECT SCANNING GEL FILTRATION ON INTERACTING SYSTEMS	KANSAS STATE UNIVERSITY	MANHATTAN	KANSAS	82	05-83	2	BBCA		18,947	26,905
5	R01 GM23045-07 21320	LEBHERZ, HERBERT G REGULATION OF INTRACELLULAR ENZYME CONCENTRATIONS	SAN DIEGO STATE UNIVERSITY	SAN DIEGO	CALIFORNIA	82	06-83	1	BIO		58,914	82,782
5	R01 GM23047-07 21800	MOSES, MONTROSE J CHROMOSOME ANALYSIS IN LEMURIFORM PRIMATES	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	06-83	0	MGN		54,918	82,377
2	P01 GM23065-07A1 13300	LONG, CALVIN L METABOLIC RESPONSE TO TRAUMA	MEDICAL COLLEGE OF OHIO AT TOLEDO	TOLEDO	OHIO	82	06-83	2	SRC		238,566	376,955
2	R01 GM23073-07 21480	RYDER, OLIVER A COMPARATIVE MOLECULAR CYTOGENETICS	ZOOLOGICAL SOCIETY OF SAN DIEGO	SAN DIEGO	CALIFORNIA	82	07-83	2	MGN		83,747	99,887
5	R01 GM23081-06 11870	LEGG, JOHN I BINDING OF SUBSTITUTION-INERT METAL IONS TO PROTEINS	WASHINGTON STATE UNIVERSITY	PULLMAN	WASHINGTON	82	03-83	0	BMT		52,256	75,344
5	P01 GM23088-05 12990	WHEELESS, LEON L, JR PROGRAM FOR CELL ANALYSIS AND SORTING IN BIOMEDICINE	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	12-82	3	SSS		222,980	362,392
5	P50 GM23095-07 13300	MOODY, FRANK G TRAUMA AND BURN RESEARCH CENTER	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	06-83	2	SRC		319,687	436,445
5	R01 GM23100-06 22300	NAKOMORI, SEN-ITIROH ANTI-CARBOHYDRATE ANTIBODIES IN CELL BIOLOGY	FRED HUTCHINSON CANCER RESEARCH CENTER	SEATTLE	WASHINGTON	82	02-83	3	CP		67,456	75,687
5	R01 GM23105-07 22450	FILLINGAME, ROBERT H PROTON-TRANSLOCATING SECTOR OF E. COLI ATPASE COMPLEX	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	06-83	1	MBC		54,661	76,940
3	R01 GM23105-07S1 22450	FILLINGAME, ROBERT H PROTON-TRANSLOCATING SECTOR OF E. COLI ATPASE COMPLEX	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	06-83	1	MBC		26,936	36,922

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5	R01 GM23123-25 22400	NODA, LAFAYETTE H HIGH ENERGY PHOSPHATE TRANSFERRING ENZYMES	DARTMOUTH COLLEGE	HANOVER	NEW HAMPSHIRE	82	08-83	0	PB		101,594	150,479
5	R01 GM23152-05 22450	CROSS, RICHARD L MECHANISM OF ATP SYNTHESIS BY THE RESPIRATORY CHAIN	UPSTATE MEDICAL CENTER	SYRACUSE	NEW YORK	81	06-83	1	PB		50,229	73,284
2	R01 GM23167-07 21700	TOBIN, ELAINE M PHYTOCHROME REGULATION OF SPECIFIC MRNA SPECIES	UNIVERSITY OF CALIFORNIA	LOS ANGELES LOS ANGELES	CALIFORNIA	82	07-83	4	CTY		86,541	118,285
5	R01 GM23182-07 21750	CALHOUN, DAVID H CONTROL OF GENE EXPRESSION BY AN ALLOSTERIC ENZYME	MOUNT SINAI SCHOOL OF MEDICINE	NEW YORK	NEW YORK	82	06-83	1	MBC		46,322	67,095
5	R01 GM23189-06 22300	VILLAREJO, MERNA R ISOLATION AND CHARACTERIZATION OF THE LAC PERMEASE	UNIVERSITY OF CALIFORNIA	DAVIS DAVIS	CALIFORNIA	81	10-82	0	PBC		40,861	53,528
5	R01 GM23193-06 22400	ALLEN, CHARLES M, JR MECHANISM AND REGULATION OF UNDECAPRENOL BIOSYNTHESIS	UNIVERSITY OF FLORIDA	GAINESVILLE	FLORIDA	82	06-83	0	MBC		41,340	60,770
5	R01 GM23197-06 11770	COOK, CLARENCE E PHARMACOLOGY OF STEROSELECTIVE RADIOIMMUNOASSAY	RESEARCH TRIANGLE INSTITUTE	RESEARCH TRIANGL	NORTH CAROLINA	81	12-82	0	PHRA		60,792	113,648
2	R01 GM23200-07 21400	CARSON, DENNIS A ADENOSINE DEAMINASE DEFICIENCY: GENETICS AND IMMUNOLOGY	SCRIPPS CLINIC AND RESEARCH FOUNDATION	LA JOLLA	CALIFORNIA	82	06-83	4	MGN		88,432	145,824
5	R01 GM23224-07 21200	CHAMPOUX, JAMES J STRAND SEPARATION IN DNA REPLICATION	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	07-83	0	GEN		69,680	93,031
2	R01 GM23238-07 22250	CANDE, W ZACHEUS FUNCTIONAL MODEL FOR MITOSIS IN CELL LINES	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	06-83	4	CBY		82,910	114,549
2	R01 GM23244-07 22300	HORWITZ, ALAN F DETERMINANTS OF MYOGENIC MEMBRANE PHENOMENA	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	06-83	4	CP		118,033	175,787
5	R01 GM23250-06 22300	HUEBNER, JAY S PHOTO-ELECTRIC MEMBRANE PROBES: PHYSICAL STUDIES	UNIVERSITY OF NORTH FLORIDA	JACKSONVILLE	FLORIDA	82	06-83	0	BBCB		25,427	37,465

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5	R01 GM23259-06 21750	NILES, EDWARD G SPECIFIC SYNTHESIS AND PROCESSING OF RRNA IN VITRO	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	81	07-83	0	PBC		42,140	62,578
3	R01 GM23259-06S1 21750	NILES, EDWARD G SPECIFIC SYNTHESIS AND PROCESSING OF RRNA IN VITRO	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	82	07-83	0	GEN		6,928	10,131
3	R01 GM23259-06S2 21750	NILES, EDWARD G SPECIFIC SYNTHESIS AND PROCESSING OF RRNA IN VITRO	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	82	07-83	0	GEN		17,320	25,328
5	R01 GM23270-06 11920	JONES, ALUN G CHEMISTRY OF TECHNETIUM RELATED TO NUCLEAR MEDICINE	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	01-83	0	BMT		142,350	186,436
2	R01 GM23289-07 22500	GRIFFIN, ROBERT C SOLID STATE NMR STUDIES OF LIPID BILAYER STRUCTURE	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	06-83	2	BBCB		101,136	131,874
5	R01 GM23292-06 22500	MOSTELLER, RAYMOND D REGULATION OF PROTEIN DEGRADATION IN ESCHERICHIA COLI	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	03-83	0	MBC		54,980	80,271
5	R01 GM23302-06 22500	HALVORSON, HERBERT R RELAXATION KINETICS OF SUBUNIT INTERACTIONS	HENRY FORD HOSPITAL	DETROIT	MICHIGAN	81	01-83	0	BBCB		52,767	78,305
2	R01 GM23303-07 22500	MATTHEWS, CHARLES R REVERSIBLE UNFOLDING OF NATIVE AND MUTANT PROTEINS	PENNSYLVANIA STATE UNIVERSITY UNIV PARK	UNIVERSITY PARK	PENNSYLVANIA	82	06-83	2	BBCA		76,786	97,742
5	R01 GM23306-07 22550	HACKERT, MARVIN L STRUCTURE AND FUNCTION OF SUPRA-MOLECULAR ASSEMBLAGES	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	06-83	0	BBCB		33,980	45,348
2	R01 GM23316-06 22300	HERZFELD, JUDITH NMR STUDIES OF BIOLOGICAL MEMBRANES	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	03-83	3	BBCB		50,370	98,624
2	R01 GM23322-04 21320	O'BRIEN, THOMAS W IMMUNOCHEMISTRY OF MAMMALIAN MITOCHONDRIAL RIBOSOMES	UNIVERSITY OF FLORIDA	GAINESVILLE	FLORIDA	82	08-83	2	MBY		56,532	80,752
2	R01 GM23325-07 12930	GLAESER, ROBERT M BIOLOGICAL STRUCTURE ANALYSIS BY ELECTRON MICROSCOPY	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	06-83	3	SSS	3	264,558	371,438

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5	R01 GM23331-04 21100	BLOCH, DAVID P FLOW-CYTOMETRIC STUDIES OF CHROMATIN	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	02-83	1	CP		42,969	56,958
5	R01 GM23336-06 13700	KAELBER, WILLIAM W EXPERIMENTAL INVESTIGATION OF PAIN	UNIVERSITY OF IOWA	IOWA CITY	IOWA	81	05-83	0	NLS		53,257	73,495
2	R01 GM23338-07 21600	CARPENTER, ADELAIDE T EM OF RECOMBINATION MUTANTS IN DROSOPHILA	UNIVERSITY OF CALIFORNIA	SAN DIEGO LA JOLLA	CALIFORNIA	82	06-83	4	GEN		79,896	105,845
5	R01 GM23345-07 21700	BAKER, BRUCE S GENETICS OF MEIOSIS AND DEVELOPMENT IN DROSOPHILA	UNIVERSITY OF CALIFORNIA	SAN DIEGO LA JOLLA	CALIFORNIA	82	06-83	0	GEN		115,325	153,249
5	R01 GM23349-06 22200	YUND, MARY A HORMONAL REGULATION OF GENE ACTIVITY IN DROSOPHILA	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	03-83	0	GEN		67,080	87,875
2	R01 GM23367-06 21750	MARZLUF, GEORGE A REGULATION OF GENE EXPRESSION IN NEUROSPORA	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	82	12-82	4	GEN		65,679	86,724
5	R01 GM23375-06 11920	BERSON, JEROME A SPIN-REACTIVITY LABELS AS DIMENSIONAL PROBES	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	04-83	0	MCHA		54,379	85,919
5	R01 GM23377-07 22300	WICKNER, WILLIAM T THE ASSEMBLY OF PROTEINS INTO BIOLOGICAL MEMBRANES	UNIVERSITY OF CALIFORNIA	LOS ANGELES LOS ANGELES	CALIFORNIA	82	06-83	1	MBC		86,551	119,659
5	R01 GM23395-06 22500	BROWN, THEODORE L NUCLEAR QUADRUPOLE DOUBLE RESONANCE SPECTROSCOPY	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	12-83	0	BBCB		40,228	57,285
5	R01 GM23403-06 22500	GRIFFIN, ROBERT G SOLID STATE NMR STUDIES OF PEPTIDES AND PROTEINS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	04-83	1	BBCB		76,210	112,700
2	R01 GM23408-06 21320	ROTH, JOHN R TRANSFER RNA PRODUCTION AND ROLE IN GENE REGULATION	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	12-82	4	MG		114,000	163,950
5	R01 GM23410-05 21320	CHOOI, YEAN W RIBOSOMAL TRANSCRIPTION UNITS IN DROSOPHILA MELANOGASTER	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	82	06-83	3	MBY		68,549	97,146

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5	R01 GM23441-06 22200	KAISER, A DALE CONTROL OF MULTICELLULAR DEVELOPMENT IN MYXOBACTERIA	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	12-82	2	MBC		71,945	111,208
5	R01 GM23443-06 21200	DUMAS, LAWRENCE B EUKARYOTIC CELL PROTEINS THAT INITIATE DNA SYSTHESIS	NORTHWESTERN UNIVERSITY	EVANSTON	ILLINOIS	82	12-82	2	MBY		92,500	125,408
5	R01 GM23445-06 22200	BERNS, MICHAEL W CELL DIVISION STUDIED BY LASER	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	02-83	2	CTY		63,957	83,784
5	R01 GM23451-05 21200	CHASE, JOHN W BIOCHEMICAL STUDIES OF E COLI EXONUCLEASE 7	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	12-82	3	BIO		38,847	66,235
5	R01 GM23453-05 22400	KRUMDIECK, CARLOS L STUDIES ON THE BIOCHEMISTRY PTEROYPOLYGLUTAMATES	UNIVERSITY OF ALABAMA IN BIRMINGHAM	BIRMINGHAM	ALABAMA	82	08-83	0	BIO		55,609	75,517
5	R01 GM23456-05 21310	NISHIURA, JAMES T GENETICS AND BIOCHEMISTRY OF EUKARYOTIC RNA POLYMERASES	BROOKLYN COLLEGE	NEW YORK	NEW YORK	82	12-82	1	GEN		20,801	33,614
5	R01 GM23464-06 21750	SOGIN, MITCHELL L THE ROLE OF REPETITIVE DNA SEQUENCES IN GENE EXPRESSION	NATIONAL JEWISH HOSPITAL & RESEARCH CTR	DENVER	COLORADO	82	01-83	0	PC		58,039	83,537
5	R01 GM23467-06 21310	RECORD, M THOMAS, JR ION EFFECTS ON INTERACTIONS OF RNA POLYMERASE & DNA	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	12-82	0	BBCA		64,356	86,873
5	R01 GM23468-06 21700	CLINE, THOMAS W REGULATION OF SEX-SPECIFIC GENES IN DROSOPHILA	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	12-82	2	GEN		60,601	97,866
5	R01 GM23474-06 22400	MAY, SHELDON W NON-HEME IRON OXYGENASE CATALYSIS	GEORGIA INSTITUTE OF TECHNOLOGY	ATLANTA	GEORGIA	82	08-83	0	PB		80,221	122,418
2	R01 GM23476-04 22250	LUDUENA, RICHARD F CONTROL OF MICROTUBULE ASSEMBLY IN VITRO AND IN VIVO	UNIVERSITY OF TEXAS HLTH SCI CTR SAN ANT	SAN ANTONIO	TEXAS	82	08-83	2	CBY		65,754	85,563
2	R01 GM23504-06 21800	JOHNSON, GEORGE B STUDIES OF HIDDEN ELECTROPHORETIC VARIATION	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	08-83	2	GEN		72,042	111,115

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2	R01 GM23509-04 21100	BRESLAUER, KENNETH J DNA POLYMORPHISM IN SOLUTION: A THERMODYNAMIC STUDY	RUTGERS THE STATE UNIV	NEW BRUNSWICK	NEW JERSEY	82	03-83	2	BBCA	62,751	96,842
5	R01 GM23516-06 22200	WALSH, CHARLES J GENE REGULATION DURING DIFFERENTIATION OF NAEGLERIA	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	08-83	0	MBY	54,193	80,657
5	R01 GM23522-06 21320	GELBART, WILLIAM M GENETIC CONTROL OF DROSOPHILA ACETYLCHOLINESTERASE	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	12-83	0	GEN	43,464	64,420
5	R01 GM23526-06 21600	SHETLAR, MARTIN D PHOTOINDUCED DNA-PROTEIN CROSS-LINKING IN CHROMATIN	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	03-83	1	RAD	51,742	66,666
5	R01 GM23529-06 22400	VILLAFRANCA, JOSEPH J STRUCTURE AND CONTROL OF GLUTAMINE SYNTHETASES	PENNSYLVANIA STATE UNIVERSITY UNIV PARK	UNIVERSITY PARK	PENNSYLVANIA	82	12-82	2	BMT	62,587	84,218
5	R01 GM23534-06 11920	GUTSCHE, C DAVID CALIXARENES AS ENZYME MODELS	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	12-82	0	SSS	49,306	75,874
5	R01 GM23547-06 22200	ROSEN, STEVEN D CELL SURFACE LECTINS AND INTERCELLULAR ADHESION	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	01-83	0	CBY	77,785	101,588
5	R01 GM23549-06 21320	ROSBASH, MICHAEL M ORGANIZATION OF YEAST RIBOSOMAL PROTEIN GENES	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	01-83	1	MBY	59,099	95,740
5	R01 GM23550-06 21800	PIECZENIK, GEORGE GENOTYPIC SELECTION: MAPPING SYNTAX-STRUCTURE-FUNCTION	RUTGERS THE STATE UNIV NEW BRUNSWICK	NEW BRUNSWICK	NEW JERSEY	82	08-83	0	GEN	36,186	54,421
5	R01 GM23562-06 21320	SCHIMMEL, PAUL R GENETIC APPROACHES TO PROTEIN-NUCLEIC ACIDS INTERACTIONS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	02-83	0	GEN	52,591	80,153
5	R01 GM23563-05 21200	HOSODA, JUNKO THE STRUCTURE OF HELIX DESTABILIZING PROTEIN	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	03-83	1	BBCA	65,647	93,875
5	R01 GM23567-05 12840	NAFIE, LAURENCE A VIBRATIONAL OPTICAL ACTIVITY IN PEPTIDE MOLECULES	SYRACUSE UNIVERSITY AT SYRACUSE	SYRACUSE	NEW YORK	82	07-83	1	BBCB	49,355	75,524

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5	R01 GM23573-05 22300	THOMPSON, THOMAS E THE PROPERTIES OF BILAYERS CONTAINING GLYCOSPHINGOLIPIDS	UNIVERSITY OF VIRGINIA	CHARLOTTESVILLE	VIRGINIA	82	12-82	1	SSS		39,836	56,862
2	R01 GM23585-06 22300	KOPPEL, DENNIS E MEMBRANE DYNAMICS OF LOCOMOTING TISSUE CELLS	UNIVERSITY OF CONNECTICUT HEALTH CENTER	FARMINGTON	CONNECTICUT	82	12-82	2	CTY		67,419	85,167
5	R01 GM23586-06 22300	JI, TAE H CROSSLINKING OF HORMONES TO RECEPTORS	UNIVERSITY OF WYOMING	LARAMIE	WYOMING	82	12-82	1	MBY		45,811	63,677
5	R01 GM23593-06 11910	HARRIS, THOMAS M VANCOMYCIN, RISTOCETIN AND RELATED ANTIBIOTICS	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	06-83	1	MCHA		61,546	99,089
5	R01 GM23599-06 22500	HORROCKS, WILLIAM D, JR NEW LANTHANIDE PROBES OF PROTEIN STRUCTURE	PENNSYLVANIA STATE UNIVERSITY UNIV PARK	UNIVERSITY PARK	PENNSYLVANIA	82	12-82	0	BBCA		54,971	74,221
5	R01 GM23605-05 21750	KRIDER, HALLIE M BRDU EFFECTS ON THE RIBOSOMAL DNA OF DROSOPHILA	UNIVERSITY OF CONNECTICUT STORRS	STORRS	CONNECTICUT	82	12-82	3	GEN		49,706	75,607
5	R01 GM23608-06 21200	MARSH, ROBERT C STRUCTURE OF CHROMOSOME REPLICATION ORIGINS	UNIVERSITY OF TEXAS DALLAS	RICHARDSON	TEXAS	82	12-82	2	MBC		46,164	62,321
5	R01 GM23617-06 21700	BEWLEY, GLENN C REGULATION OF GENE EXPRESSION DURING DEVELOPMENT	NORTH CAROLINA STATE UNIVERSITY RALEIGH	RALEIGH	NORTH CAROLINA	82	12-82	0	GEN		47,433	66,406
2	R01 GM23618-06 13700	COLLINS, ROBERT L LATERALIZATION OF FUNCTION: BEHAVIOR GENETIC ANALYSIS	JACKSON LABORATORY	BAR HARBOR	MAINE	82	07-83	2	MGN		84,620	128,508
5	R01 GM23635-05 21700	DI BERARDINO, MARIE A NORMAL DIFFERENTIATION AND CARCINOGENESIS	MEDICAL COLLEGE OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	03-83	1	CBY		76,038	117,144
5	R01 GM23638-06 21200	GOORHA, RAKESH M DNA REPLICATION OF FROG VIRUS 3	ST. JUDE CHILDREN'S RESEARCH HOSPITAL	MEMPHIS	TENNESSEE	82	06-83	0	VR		65,760	91,209
5	R01 GM23642-06 22400	MARNETT, LAWRENCE J PROSTAGLANDIN SYNTHETASE	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	82	12-82	0	BIO		49,542	73,376

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5	R01 GM23656-06 11920	BIELSKI, BENON H BIOLOGICAL SUPEROXIDE RADICAL MECHANISMS	ASSOCIATED UNIV-BROOKHAVEN NATL LAB	UPTON	NEW YORK	82	12-82	0	RAD		57,955	90,928
5	R01 GM23670-06 22600	BATES, RICHARD D, JR MOLECULAR DYNAMICS OF HYDROGEN BONDING IN FLUIDS	GEORGETOWN UNIVERSITY	WASHINGTON	DIST OF COL	82	12-82	0	BBCA		38,860	54,316
5	R01 GM23671-06 21750	PFAHL, MAGNUS GENETIC ANALYSIS OF LAC REPRESSOR AND OPERATOR	SALK INSTITUTE FOR BIOLOGICAL STUDIES	LA JOLLA	CALIFORNIA	82	12-82	2	MBC		57,234	92,099
5	R01 GM23674-06 21600	GRUNSTEIN, MICHAEL HISTONE GENE EXPRESSION IN DEVELOPING SEA URCHIN EMBRYO	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	12-82	2	MBY		89,037	115,554
5	R01 GM23679-03 22400	LAWTON, RICHARD G REAGENTS FOR EQUILIBRIUM PROTEIN CROSS-LINKS	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	81	09-82	0	BIO		47,047	74,334
5	R01 GM23681-06 21600	SHAW, BARBARA R CHANGES IN NUCLEOSOME STRUCTURE DURING EMBRYOGENESIS	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	12-82	1	PBC		40,187	59,406
5	R01 GM23696-06 13700	ROSENFELD, JOEL P MORPHINE AND NOCICEPTIVE BRAIN STIMULATION	NORTHWESTERN UNIVERSITY	EVANSTON	ILLINOIS	82	02-83	2	DABR		33,659	46,449
2	R01 GM23697-07 21310	WOODY, ROBERT W SPECTROSCOPIC STUDIES OF RNA POLYMERASE MECHANISM	COLORADO STATE UNIVERSITY	FORT COLLINS	COLORADO	82	05-83	2	BBCA		61,610	81,582
5	R01 GM23705-10 21320	SZER, WLODZIMIERZ REGULATORY MECHANISMS IN PROTEIN BIOSYNTHESIS	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82	05-83	3	MBY		74,724	111,712
5	R01 GM23707-05 21700	BAKER, WILLIAM K GENETIC CONTROL OF DIFFERENTIAL CELL FUNCTION	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	81	12-82	0	GEN		38,480	56,566
5	R01 GM23719-07 21200	MODRICH, PAUL L ENZYMATIC BASIS OF TYPE II RESTRICTION AND MODIFICATION	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	07-83	3	BIO		146,320	219,480
5	R01 GM23731-06 22300	PIERCE, SIDNEY K CELLULAR WATER BALANCE: THE INVERTEBRATE MECHANISM	UNIVERSITY OF MARYLAND COLLEGE PK CAMPUS	COLLEGE PARK	MARYLAND	82	03-83	0	PHY		47,331	67,210

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5	P01 GM23732-06 12200	YATES, FRANCIS E CENTER FOR SYSTEMS ANALYSIS IN PATHOPHYSIOLOGY	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	04-83	1	SRC	472,701	582,118
5	R01 GM23736-06 21320	FINNERTY, VICTORIA M REGULATION OF GENE EXPRESSION IN DROSOPHILA	CLARK COLLEGE	ATLANTA	GEORGIA	82	03-83	1	GEN	79,222	118,333
2	R01 GM23750-07 CA 22200	REDDY, JANARDIAN K BIOLOGIC STUDIES WITH LIVER PEROXISOME PROLIFERATORS	NORTHWESTERN UNIVERSITY	CHICAGO	ILLINOIS	82	06-83	4	PTHB	110,306	146,427
5	R01 GM23765-05 12840	ROBINSON, G WILSE SUBNANOSECOND PRIMARY EVENTS IN BIOLOGY	TEXAS TECH UNIVERSITY	LUBBOCK	TEXAS	82	06-83	1	BBCA	35,820	45,491
5	R01 GM23773-07 11920	HOGENKAMP, HENRICUS P STRUCTURE AND REACTIONS OF THE COBAMIDE COENZYMES	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	08-83	0	BIO	83,866	116,574
5	R01 GM23807-05 22200	ELLINGSON, JOHN S METABOLISM OF PHOSPHOLIPIDS IN SECONDARY LYSOSOMES	WEST VIRGINIA UNIVERSITY	MORGANTOWN	WEST VIRGINIA	82	08-83	1	CTY	53,067	75,112
2	R01 GM23817-18 22500	FEENEY, ROBERT E COMPARATIVE BIOCHEMISTRY OF PROTEINS	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	05-83	3	PC	61,900	78,919
5	R01 GM23853-06 21320	PAOLETTI, ENZO VACCINIA RNA SYNTHESIS: A MODEL FOR MRNA BIOGENESIS	NEW YORK STATE DEPARTMENT OF HEALTH	ALBANY	NEW YORK	82	03-83	0	EVR	60,557	92,068
5	R01 GM23858-05 22300	HOLLOWAY, PETER W THE DYNAMIC STATE OF CYTOCHROME B5 IN MEMBRANES	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	12-82	3	PB	66,200	94,730
5	R01 GM23869-06 22450	TIMKOVICH, RUSSELL ENZYMIC REACTIONS OF DISSIMILATORY NITRITE REDUCTASES	ILLINOIS INSTITUTE OF TECHNOLOGY	CHICAGO	ILLINOIS	82	03-83	1	BIO	48,080	77,392
5	R01 GM23883-06 22250	WATERSTON, ROBERT H MOLECULAR GENETICS OF MUSCLE ASSEMBLY IN C. ELEGANS	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	03-83	2	CTY	64,974	99,335
5	R01 GM23892-05 22200	BECHTOL, KATHLEEN B IMMUNOCHEMICAL APPROACH TO SPERMATOGENESIS	WISTAR INSTITUTE OF ANATOMY AND BIOLOGY	PHILADELPHIA	PENNSYLVANIA	82	08-83	1	HED	76,016	126,672

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5	R01 GM23900-05 22410	TRIMBLE, ROBERT B GLYCOPROTEIN BIOSYNTHESIS IN YEAST	NEW YORK STATE DEPARTMENT OF HEALTH	ALBANY	NEW YORK	81	08-83 30,676	0	PC 44,811	
5	R01 GM23902-06 22410	LAINE, ROGER A CHEMISTRY OF CELL-SURFACE AND RELEASED GLYCOPROTEINS	UNIVERSITY OF KENTUCKY	LEXINGTON	KENTUCKY	82	06-83 79,214	0	PBC 115,813	
5	R01 GM23905-06 21600	HOLMQUIST, GERALD P G-BANDING MECHANISMS IN MAMMALIAN CHROMOSOMES	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	06-83 75,013	2	MGN 100,739	
5	R01 GM23910-06 22200	SHAPIRO, BENNETT M MOLECULAR EVENTS IN FERTILIZATION	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	07-83 85,235	2	CBY 113,875	
2	R01 GM23913-05A1 22400	FULCO, ARMAND J SOLUBLE CYTOCHROME P-450 HYDROXYLASES FROM BACTERIA	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	07-83 84,828	3	PB 114,543	
5	R01 GM23917-06 21200	GEORGOPOULOS, CONSTANTINE P BACTERIAL FUNCTIONS IN PHAGE DEVELOPMENT	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	03-83 86,173	2	MBC 124,951	
5	R01 GM23922-05 21200	BEREZNEY, RONALD NUCLEAR MATRIX STRUCTURE AND DNA REPLICATION	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	82	02-83 55,363	1	CTY 79,453	
2	R01 GM23928-06 22200	ALBERTS, BRUCE M BIOCHEMISTRY OF GENE EXPRESSION IN HIGHER EUKARYOTES	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	07-83 86,466	4	MBY 104,101	
2	R01 GM23942-04 22600	RHODES, WILLIAM C ELECTRONIC RESPONSE PROPERTIES OF BIOPOLYMERS	FLORIDA STATE UNIVERSITY	TALLAHASSEE	FLORIDA	82	03-83 31,860	2	BBCA 46,038	
5	R01 GM23944-03 22300	ALBERTE, RANDALL S CONTROL OF ORGANELLE MEMBRANE BIOGENESIS	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	81	03-83 37,532	0	CTY 60,398	
5	R01 GM23946-06 13420	YANNAS, IOANNIS V DESIGN AND EVALUATION OF AN ARTIFICIAL SKIN	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	03-83 115,578	0	SAT 162,010	
5	R01 GM23961-06 21280	LAMBOWITZ, ALAN M BIOGENESIS OF MITOCHONDRIA IN NEUROSPORA	ST. LOUIS UNIVERSITY	SAINT LOUIS	MISSOURI	82	06-83 55,908	2	MBY 83,362	

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2	R01 GM23967-04A1 21750	KINSEY, JOHN A GENETIC STUDIES OF GLUTAMATE DEHYDROGENASE MUTANTS	UNIVERSITY OF KANSAS COL HLTH SCI & HOSP	KANSAS CITY	KANSAS	82	08-83	2	GEN		65,800	79,561
5	R01 GM23990-05 22300	HAYNES, DUNCAN H SARCOPLASMIC RETICULUM: CA2+ TRANSPORT AND RELEASE	UNIVERSITY OF MIAMI	MIAMI	FLORIDA	82	08-83	3	PB		68,190	113,195
5	R01 GM23999-06 21320	SYPHERD, PAUL S MODIFICATION OF ELONGATION FACTOR-1 DURING MORPHOGENESIS	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	06-83	2	MBC		71,124	99,218
5	R01 GM24009-05 21750	TORRIANI-GORINI, ANNAMARIA PHOSPHATE REGULATION OF E COLI: ALKALINE PHOSPHATASE	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	03-83	3	MBC		72,563	109,711
2	R01 GM24019-06 21700	COHEN, LEONARD H THE ROLES OF HISTONE SUBTYPES IN DEVELOPMENT	INSTITUTE FOR CANCER RESEARCH	PHILADELPHIA	PENNSYLVANIA	82	03-83	2	MBY		95,330	134,927
5	R01 GM24020-07 21200	ALBERTS, BRUCE M DNA-PROTEIN INTERACTIONS IN DNA-REPLICATION CONTROL	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	08-83	1	PC		143,794	183,272
5	R01 GM24028-05 13410	SAELINGER, CATHARINE B PATHOGENESIS OF PSEUDOMONAS IN THERMAL INJURY	UNIVERSITY OF CINCINNATI	CINCINNATI	OHIO	82	03-83	2	SAT		60,909	85,273
2	R01 GM24030-07 21600	LERMAN, LEONARD S STRATEGY FOR THE CHARACTERIZATION OF THE HUMAN GENOME	STATE UNIVERSITY OF NEW YORK AT ALBANY	ALBANY	NEW YORK	82	08-83	2	BBCA		108,743	147,401
2	R01 GM24031-06 12840	VESTAL, MARVIN L CROSSED-BEAM LC-MS FOR INVOLATILE BIOLOGICAL SAMPLES	UNIVERSITY OF HOUSTON AT HOUSTON	HOUSTON	TEXAS	82	11-82	2	BMT		86,874	102,181
2	R01 GM24032-06 12840	STRYER, LUBERT OPTICAL STUDIES OF PROTEIN STRUCTURE AND FUNCTION	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	03-83	4	SSS		85,000	113,710
2	R01 GM24034-06 21320	LAKE, JAMES A SPATIAL ARRANGEMENT OF FUNCTIONAL SITES IN RIBOSOMES	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	11-82	4	MBY		89,895	112,923
5	R01 GM24035-06 22300	HELMKAMP, GEORGE M, JR MEMBRANE-PHOSPHOLIPID EXCHANGE PROTEIN INTERACTIONS	UNIVERSITY OF KANSAS COL HLTH SCI & HOSP	KANSAS CITY	KANSAS	82	06-83	0	PC		53,278	71,073

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5 R01 GM24040-05 21700	MILLS, DALLICE I GENE EXPRESSION DURING MEIOSIS	OREGON STATE UNIVERSITY	CORVALLIS	OREGON	81	08-83	0	GEN	53,767	69,897
5 R01 GM24053-03 11920	NEWKOME, GEORGE R SYNTHETIC MACROCYCLES AS ENZYMATIC REDOX MIMICS	LOUISIANA STATE UNIV A&M COL BATON ROUGE	BATON ROUGE	LOUISIANA	81	09-82	0	BMT	22,838	30,758
5 R01 GM24054-05 11910	GANEM, BRUCE SYNTHESIS AND BIOSYNTHESIS IN THE SHIKIMATE PATHWAY	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	12-82	1	BNP	71,020	104,089
5 R01 GM24068-05 22300	PETHICA, BRIAN A THE EFFECTS OF APPLIED ELECTRIC FIELDS ON SURFACE FILMS	CLARKSON COLLEGE OF TECHNOLOGY	POTSDAM	NEW YORK	82	03-83	0	BBCB	3,750	5,756
5 R01 GM24096-06 21700	GUILFOYLE, THOMAS J REGULATION OF RNA POLYMERASES DURING DEVELOPMENT	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	07-83	1	CTY	49,445	68,729
5 R01 GM24104-03 12400	JARZEMBSKI, WILLIAM B CURRENT PATHWAYS IN TISSUE DUE TO ELECTRICAL STIMULUS	TEXAS TECH UNIVERSITY	LUBBOCK	TEXAS	81	12-82	0	SGYB	27,798	35,114
2 R01 GM24109-06 21320	CRAVEN, GARY R THE ASSEMBLY MECHANISM OF THE BACTERIAL RIBOSOME	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	07-83	4	MBY	130,037	182,513
5 R01 GM24110-06 21600	PETES, THOMAS D YEAST CHROMOSOME STRUCTURE AND REPLICATION	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	07-83	2	GEN	86,494	142,035
5 R01 GM24118-05 21750	KEDES, LAURENCE H HISTONE GENE TRANSCRIPTION IN EMBRYONIC DEVELOPMENT	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	81	06-83	0	CBY	43,016	62,373
2 R01 GM24125-06 21800	CHAPMAN, VERNE M REGULATION OF X-CHROMOSOME DIFFERENTIATION IN MAMMALS	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	07-83	2	MGN	92,770	126,775
2 R01 GM24129-06 22400	BENKOVIC, STEPHEN J THE TRANSFORMYLASE ENZYMES	PENNSYLVANIA STATE UNIVERSITY UNIV PARK	UNIVERSITY PARK	PENNSYLVANIA	82	06-83	4	ET	114,661	147,929
5 R01 GM24144-05 11920	KAGAN, JACQUES PHOTOTOXICITY OF A-TERTHIENYL AND RELATED COMPOUNDS	UNIVERSITY OF ILLINOIS CHICAGO CIRCLE	CHICAGO	ILLINOIS	82	08-83	0	TOX	54,815	82,516

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5	R01 GM24147-05 22300	DOYLE, DARRELL J MEMBRANE BIOGENESIS IN NORMAL AND MALIGNANT CELLS	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	12-82	1	CTY		100,538	143,081
5	R01 GM24168-06 22300	KUTCHAI, HOWARD C RED CELLS AND CHICK HEART: TRANSPORT AND FLUIDITY	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	07-83	0	PHY		45,720	66,294
5	R01 GM24172-06 22200	KIRK, DAVID L GENETIC CONTROL OF MORPHOGENESIS IN VOLVOX	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	07-83	0	CBY		58,044	89,968
5	R01 GM24173-06 11790	GEREN, COLLIS R VENOM COMPONENTS: ISOLATION, CHARACTERIZATION AND USE	UNIVERSITY OF ARKANSAS AT FAYETTEVILLE	FAYETTEVILLE	ARKANSAS	82	06-83	0	TOX		41,897	57,399
5	R01 GM24178-06 21250	LITTLE, JOHN W BIOCHEMICAL ANALYSIS OF THE E. COLI LEXA GENE PRODUCT	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	07-83	2	MG		79,000	106,612
5	R01 GM24185-06 21700	PETRI, WILLIAM H CONTROL OF DIFFERENTIATION: DROSOPHILA CHORION GENES	BOSTON COLLEGE	CHESTNUT HILL	MASSACHUSETTS	82	08-83	0	GEN		58,552	86,071
5	R01 GM24189-06 21320	LIEBMAN, SUSAN W NONSENSE SUPPRESSION AND ANTISUPPRESSION IN YEAST	UNIVERSITY OF ILLINOIS CHICAGO CIRCLE	CHICAGO	ILLINOIS	82	07-83	2	GEN		37,365	56,421
5	R01 GM24195-06 22450	MALONEY, PETER C ION GRADIENTS AND ENERGY COUPLING IN BACTERIA	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	07-83	0	PB		73,517	110,276
5	R01 GM24206-05 13420	BLACKBURN, GEORGE L BRANCHED CHAIN AMINO ACID FEEDING DURING INJURY	NEW ENGLAND DEACONESS HOSPITAL	BOSTON	MASSACHUSETTS	82	07-83	3	SAT		86,288	143,900
5	R01 GM24211-06 11880	JUSKO, WILLIAM J AGE AND DISEASE IN DRUG DISPOSITION	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	82	06-83	1	PHRA		77,488	99,064
5	R01 GM24212-06 21200	POLISKY, BARRY A MOLECULAR BASIS OF UNCONTROLLED REPLICATION	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	82	06-83	2	MG		72,938	102,889
5	R01 GM24225-06 21700	KAFATOS, FOTIS C REGULATION AND EVOLUTION OF MULTIGENE FAMILIES	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	06-83	2	MBY		54,631	84,132

TABLE-1 RESEARCH GRANTS ACTIVE AS OF 09-30-82 BY GRANT NUMBER

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2 R01 GM24235-04 11920	RODGERS, MICHAEL A SINGLET OXYGEN IN BIOLOGICAL ENVIRONMENTS	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	12-82 77,730	2	CPA	99,336
5 R01 GM24237-05 12930	BEER, MICHAEL ELECTRON MICROSCOPIC TECHNIQUES FOR MEMBRANE STRUCTURE	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	12-82 56,396	1	BBCB	84,094
5 R01 GM24238-05 21250	WANG, SHIH Y CHEMICAL ANALYSIS OF NON-DIMERIC UV DAMAGE IN DNA	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	03-83 49,358	2	BBCA	74,787
2 R01 GM24251-06 22250	HARRIS, ALBERT K CONTROL AND GUIDANCE OF TISSUE CELL LOCOMOTION	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	08-83 72,593	2	CP	91,938
5 R01 GM24254-06 11910	LAROCK, RICHARD C SYNTHESIS OF BIOLOGICALLY ACTIVE HETEROCYCLES	IOWA STATE UNIVERSITY OF SCIENCE & TECH	AMES	IOWA	82	08-83 55,626	0	BMT	74,539
5 R01 GM24265-05 21480	ELLIOTT, ROSEMARY W MAPPING MOUSE GENES USING 2-D ELECTROPHORESIS	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	08-83 38,879	1	MGN	53,679
5 R01 GM24266-06 22500	OPELLA, STANLEY J NMR STUDIES OF BIOLOGICAL SUPRAMOLECULAR STRUCTURES	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	07-83 70,526	0	BBCB	116,368
5 R01 GM24267-06 22300	DAVIS, DONALD G THE CONFORMATION AND FUNCTION OF CYCLIC PEPTIDES	ADELPHI UNIVERSITY	GARDEN CITY	NEW YORK	82	06-83 29,169	0	BBCB	42,558
5 R01 GM24270-05 21780	PATO, MARTIN L EXCISION AND REPLICATION OF MU VIRUS DNA	NATIONAL JEWISH HOSPITAL & RESEARCH CTR	DENVER	COLORADO	82	12-82 57,000	3	MG	82,935
5 R01 GM24273-03 22300	MEHLHORN, ROLF J ASYMMETRY OF THE INNER MITOCHONDRIAL MEMBRANE	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	81	12-82 48,264	0	BBCB	67,328
5 R01 GM24279-06 21750	FIRTEL, RICHARD A GENE STRUCTURE AND TRANSCRIPTIONAL REGULATION	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	08-83 146,298	2	MBY	192,393
5 R01 GM24285-06 21280	WALLACE, DOUGLAS C MITOCHONDRIAL GENETICS AND NEOPLASTIC TRANSFORMATION	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	08-83 72,349	0	MGN	122,270

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							DIRECT		DOLLARS	TOTAL
5	R01 GM24290-05 22400	GARBERS, DAVID L GUANYLATE CYCLASE: LARGE SCALE PURIFICATION	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	12-82 66,427	0	BIO	102,630
5	R01 GM24294-05 21750	JENDRISAK, JEROME J REGULATION OF EUKARYOTIC GENE TRANSCRIPTION	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL MINNEAPOLIS	MINNEAPOLIS	MINNESOTA	81	12-82 44,322	0	BIO	60,278
5	R01 GM24299-06 21700	KAUFMAN, THOMAS C THE GENETIC CONTROL OF MORPHOGENESIS IN DROSOPHILA	INDIANA UNIVERSITY BLOOMINGTON BLOOMINGTON	BLOOMINGTON	INDIANA	82	07-83 68,263	0	GEN	98,981
5	R01 GM24300-05 12350	NELSON, RONALD J DEVELOPMENT OF A MICROPOROUS TRACHEAL PROSTHESIS	LOS ANGELES COUNTY HARBOR-UCLA MED CTR TORRANCE	TORRANCE	CALIFORNIA	82	02-83 70,318	1	SB	89,665
2	R01 GM24309-06 21480	EPSTEIN, CHARLES J MOLECULAR EFFECTS OF CHROMOSMAL ANEUPLOIDY	UNIVERSITY OF CALIFORNIA SAN FRANCISCO SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	07-83 97,979	4	MGN	125,119
5	R01 GM24313-06 13200	MILLER, EDWARD D, JR ANESTHETIC AGENTS--RENIN--HYPERTENSION	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	06-83 48,919	0	SAT	70,933
5	R01 GM24314-06 12930	MORRISON, GEORGE H ION MICROSCOPY IN BIOLOGY AND MEDICINE	CORNELL UNIVERSITY ITHACA ITHACA	ITHACA	NEW YORK	82	06-83 49,714	0	SSS	72,972
5	R01 GM24320-06 21600	DRLICA, KARL A STRUCTURE OF THE BACTERIAL CHROMOSOME	UNIVERSITY OF ROCHESTER ROCHESTER	ROCHESTER	NEW YORK	82	08-83 67,418	2	MG	117,307
5	R01 GM24330-05 21320	HATFIELD, G WESLEY TRANSLATIONAL CONTROL OF TRANSCRIPTION TERMINATION	UNIVERSITY OF CALIFORNIA IRVINE IRVINE	IRVINE	CALIFORNIA	82	11-82 78,431	3	BIO	102,745
5	R01 GM24337-06 11870	TAYLOR, PALMER W PHARMACOLOGY OF MEMBRANE ASSOCIATED RECEPTORS	UNIVERSITY OF CALIFORNIA SAN DIEGO LA JOLLA	LA JOLLA	CALIFORNIA	82	06-83 53,235	2	NLS	70,856
5	R01 GM24347-05 21780	JASKUNAS, S RICHARD GENETIC REARRANGEMENTS	INDIANA UNIVERSITY BLOOMINGTON BLOOMINGTON	BLOOMINGTON	INDIANA	82	11-82 79,736	1	MG	110,200
5	R01 GM24348-04 22400	GUILLORY, RICHARD J COMPLEX I CHARACTERIZATION WITH PHOTOAFFINITY LABELS	UNIVERSITY OF HAWAII AT MANOA HONOLULU	HONOLULU	HAWAII	82	03-83 35,642	1	PB	49,899

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2	R01 GM24349-04 12820	NOVOTNY, MILOS V IMPROVE BIOCHEM HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	82	11-82	2	BMT	68,525	88,072
5	R01 GM24361-05 21320	SADOWSKI, PAUL D ASSEMBLY AND RECOMBINATION IN PROKARYOTES AND EUKARYOTES	UNIVERSITY OF TORONTO	TORONTO	CANADA	82	12-82	1	SSS	86,199	86,199
2	R01 GM24364-04 22250	SALMON, EDWARD D MECHANISMS OF MITOTIC SPINDLE ASSEMBLY AND FUNCTION	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	11-82	4	CBY	97,233	120,066
5	R01 GM24365-06 21320	SERWER, PHILIP BIOPHYSICS AND GENETICS OF VIRAL DNA PACKAGING	UNIVERSITY OF TEXAS HLTH SCI CTR SAN ANT	SAN ANTONIO	TEXAS	82	06-83	0	MG	54,155	73,651
5	R01 GM24375-06 22200	SHIMIZU, NOBUYOSHI GENETIC CONTROL OF MAMMALIAN CELL SURFACE FUNCTIONS	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	06-83	2	MGN	72,368	100,007
5	R01 GM24383-04 22300	COOPER, TERRANCE G SYNTHESIS AND ASSEMBLY OF EUCARYOTIC MEMBRANES	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	12-82	1	BIO	53,427	80,429
5	R01 GM24391-06 21200	SINHA, NAVIN K IN VITRO ANALYSIS OF A DNA REPLICATION APPARATUS	RUTGERS THE STATE UNIV NEW BRUNSWICK	NEW BRUNSWICK	NEW JERSEY	82	07-83	0	MG	54,188	85,037
5	R01 GM24392-03 22400	MATTA, KHUSHI L STUDIES RELATED TO ENDOGLYCOSIDASES	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	81	08-83	0	MCHA	43,541	63,092
2	R01 GM24410-04 11920	ABERHART, DONALD J STUDIES ON ENZYME STEREOCHEMISTRY	WORCESTER FDN FOR EXPER BIOLOGY	SHREWSBURY	MASSACHUSETTS	82	11-82	3	BNP	77,832	125,008
2	R01 GM24425-04 11910	SHIMIZU, YUZURU BIOSYNTHESIS OF MARINE NATURAL PRODUCTS	UNIVERSITY OF RHODE ISLAND	KINGSTON	RHODE ISLAND	82	06-83	2	BNP	55,591	75,048
5	R01 GM24430-05 21600	GRAINGER, ROBERT M FUNCTIONAL ORGANIZATION OF A PURIFIED EUKARYOTIC GENE	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	12-82	1	GEN	74,095	104,738
2	R01 GM24441-04 21200	BAMBARA, ROBERT A ENZYMATIC MECHANISMS OF DNA SYNTHESIS	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	12-82	2	BIO	63,419	98,619

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5	R01 GM24442-05 21750	BANCROFT, F CARTER REGULATION OF GROWTH HORMONE MESSENGER RNA	SLOAN-KETTERING INSTITUTE FOR CANCER RES	NEW YORK	NEW YORK	82	12-82	3	MBY		99,363	144,757
5	R01 GM24443-05 21100	PROHOFSKY, EARL W MOTIONAL DYNAMICS OF DNA HELICES	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	12-82	0	BBCA		61,010	85,414
5	R01 GM24444-05 22250	FULTON, CHANDLER M CELL DIFFERENTIATION AND ORGANELLE MORPHOGENESIS	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	03-83	0	CBY		88,542	141,417
5	R01 GM24455-06 21750	HALL, DWIGHT H ORGANIZATION AND EXPRESSION OF THE GENOME OF PHAGE T4	GEORGIA INSTITUTE OF TECHNOLOGY	ATLANTA	GEORGIA	82	02-83	0	MBC		54,745	83,480
5	R01 GM24459-05 22300	SCHNEIDER, DONALD L ENZYMES LINKING BIOENERGY TO CATABOLISM IN LYSOSOMES	DARTMOUTH COLLEGE	HANOVER	NEW HAMPSHIRE	82	06-83	0	BIO		29,628	43,998
5	R01 GM24461-06 21310	GUTERMAN, SONIA K RHO PROTEIN INTERACTION WITH RNA AND RNA POLYMERASE	BOSTON UNIVERSITY	BOSTON	MASSACHUSETTS	82	03-83	0	MBC		49,986	77,328
5	R01 GM24472-05 13901	PRENTICE, ROSS L STATISTICAL METHODS FOR CASE-CONTROL STUDIES	FRED HUTCHINSON CANCER RESEARCH CENTER	SEATTLE	WASHINGTON	82	12-82	0	SSS		33,521	38,105
5	R01 GM24474-05 11940	KRAUS, GEORGE A SILYL ENONES IN ANTHRACYCLINE SYNTHESIS	IOWA STATE UNIVERSITY OF SCIENCE & TECH	AMES	IOWA	82	02-83	0	MCHA		42,748	57,282
2	R01 GM24480-04 11920	COFFMAN, ROBERT E ELECTRONIC AND MAGNETIC INTERACTIONS OF ADENOSYLCOBALAMI	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	08-83	2	BMT		54,810	73,253
2	R01 GM24481-05A1 13410	RAPAPORT, FELIX T MECHANISMS OF CELL DAMAGE IN SEVERE BURNS	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	04-83	2	SAT		175,424	240,462
2	P01 GM24483-04 11900	MARSHALL, GARLAND R COMPUTER-AIDED DRUG DESIGN	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	11-82	2	PTR		345,000	509,826
5	R01 GM24485-06 22550	STROUD, ROBERT M STRUCTURE AND FUNCTION OF PROTEINS AT MOLECULAR LEVEL	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	03-83	1	BBCB		85,510	111,491

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2	R01 GM24486-06 HL 22500	ACKERS, GARY K REGULATORY INTERACTIONS IN PROTEIN/NUCLEIC ACID SYSTEMS	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	08-83	4	BBCA	160,822	224,757
5	P01 GM24487-05 12300	LYMAN, DONALD J BIOMEDICAL ENGINEERING CENTER FOR POLYMERIC IMPLANTS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	01-83	1	SRC	329,831	477,537
5	R01 GM24488-03 22500	STAPLETON, HARVEY J ELECTRON SPIN RELAXATION AT ACTIVE SITES IN PROTEINS	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN URBANA		ILLINOIS	81	04-83	0	BMT	42,041	55,799
5	R01 GM24492-05 22600	WARSHEL, ARIEH THEORETICAL STUDIES OF ENZYMATIC REACTIONS	UNIVERSITY OF SOUTHERN CALIFORNIA LOS ANGELES		CALIFORNIA	82	12-82	0	BBCA	37,860	54,356
5	R01 GM24494-05 21100	BORER, PHILIP N BASIC NUCLEIC ACID STRUCTURES: FORM AND INTERACTION	UNIVERSITY OF CALIFORNIA IRVINE IRVINE		CALIFORNIA	82	02-83	1	BBCA	34,356	44,417
5	R01 GM24496-05 21200	MOUNT, DAVID W MECHANISM OF INDUCTION OF VIRAL AND CELLULAR FUNCTIONS	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	12-82	3	MG	86,172	122,366
2	R01 GM24497-05 22400	TABITA, FRED R FUNCTION AND ASSEMBLY OF CO2 ASSIMILATORY ENZYMES	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	12-82	4	BIO	69,318	92,529
5	R01 GM24507-04 22300	JACQUEZ, JOHN A IDENTIFICATION OF TRANSPORT ASSOCIATED PROTEINS	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	81	12-82	0	PHY	33,857	53,494
5	R01 GM24517-05 11940	MIDLAND, M MARK ASYMMETRIC REDUCTIONS VIA TRIALKYLBORANES	UNIVERSITY OF CALIFORNIA RIVERSIDE	RIVERSIDE	CALIFORNIA	82	12-82	1	BMT	63,000	82,530
5	R01 GM24524-03 13200	DOWNES, HALL FATE AND EFFECTS OF LOCAL ANESTHETIC AEROSOLS	OREGON HEALTH SCIENCES UNIVERSITY	PORTLAND	OREGON	81	12-82	0	SGYA	41,356	54,590
5	R01 GM24526-05 22550	JEFFREY, GEORGE A STRUCTURAL STUDIES OF CARBOHYDRATES	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	12-82	0	BBCA	69,080	104,482
5	R01 GM24527-06 22500	STEINMAN, HOWARD M SUPEROXIDE DISMUTASES: STRUCTURE, FUNCTION, EVOLUTION	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	04-83	0	BIO	68,310	126,277

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5	R01 GM24531-05 13200	TINKER, JOHN H ORGAN PROTECTION: ROLE OF ANESTHETICS	MAYO FOUNDATION	ROCHESTER	MINNESOTA	82	12-82	1	SAT		88,360	118,023
5	R01 GM24544-06 21200	WANG, JAMES C PHYSICOCHEMICAL STUDIES OF NUCLEIC ACIDS	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	06-83	2	MG		125,954	192,349
5	R01 GM24561-05 22400	HUNTER, F EDMUND, JR GSH-SPECIFIC ENZYMES ON ORGANONITRATES, PROSTAGLANDINS	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	12-82	0	BIO		39,500	61,225
5	R01 GM24570-05 22500	MATTHEWS, CHARLES R CHEMICAL TRAPPING OF INTERMEDIATES IN PROTEIN FOLDING	PENNSYLVANIA STATE UNIVERSITY UNIV PARK	UNIVERSITY PARK	PENNSYLVANIA	82	12-82	1	BBCA		30,545	40,422
5	R01 GM24571-05 22200	PARDEE, ARTHUR B BIOCHEMISTRY OF GO/G1 REGULATION IN ANIMAL CELLS	SIDNEY FARBER CANCER INSTITUTE	BOSTON	MASSACHUSETTS	82	04-83	1	CP		86,015	147,118
5	R01 GM24572-05 21700	PELLEGRINI, MARIA C EXPRESSION AND ORGANIZATION OF RIBOSOMAL PROTEIN GENES	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	12-82	1	GEN		61,315	88,600
5	R01 GM24576-05 21320	ELSEVIERS, DIRK ACCURACY IN GENE EXPRESSION	NEW YORK MEDICAL COLLEGE	VALHALLA	NEW YORK	82	12-82	1	MG		48,412	77,943
5	R01 GM24589-05 21780	DEONIER, RICHARD C SPECIALIZED RECOMBINATION IN THE E COLI CHROMOSOME	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	12-82	3	MG		67,856	99,070
5	R01 GM24590-05 22300	HO, JOHN T PHOSPHOLID PHASE TRANSITIONS AND MEMBRANE FUSION	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	82	12-82	0	BBCB		40,612	54,169
5	R01 GM24599-05 22250	YARBROUGH, LYNWOOD R MOLECULAR MECHANISMS OF TUBULIN-LIGAND INTERACTIONS	UNIVERSITY OF KANSAS COL HLTH SCI & HOSP	KANSAS CITY	KANSAS	82	04-83	1	BBCA		50,356	66,841
5	R01 GM24602-05 22500	HERMODSON, MARK A AMINO ACID SEQUENCES OF BINDING PROTEINS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	03-83	3	PC		78,997	108,996
5	R01 GM24604-03 22200	MICHAELS, JOHN E EFFECTS OF DIAZOOXONORLEUCINE ON COLON SURFACE CELLS	UNIVERSITY OF CINCINNATI	CINCINNATI	OHIO	81	12-82	0	CBY		25,742	35,524

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5	R01 GM24612-05 11750	HUNT, C ANTHONY LIPOSOMES IN VIVO: FOR DRUGS AND PRODRUGS	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	02-83 51,372	3	PHRA	67,297
2	R01 GM24623-04 22550	HAMILTON, JEAN A STRUCTURAL STUDIES ON COMPLEXES BY X-RAY DIFFRACTION	INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS	INDIANAPOLIS	INDIANA	82	03-83 38,810	2	BBCA	55,094
2	R01 GM24658-12 22400	ZALKIN, HOWARD GLUTAMINE AMIDOTRANSFERASE STRUCTURE/FUNCTION/REGULATION	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	06-83 104,504	4	MBC	137,158
5	R01 GM24663-05 21400	HORVITZ, HOWARD R GENETIC ANALYSIS OF NEMATODE EGG-LAYING	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	12-82 50,149	3	GEN	65,689
5	R01 GM24667-05 22400	MIDELFORT, CHRISTIAN F OXYGEN LABELING STUDIES IN ATP DEPENDENT ENZYMES	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	12-82 57,802	2	PB	106,222
5	R01 GM24681-05 21800	TASHIAN, RICHARD E EVOLUTION OF MAMMALIAN CARBONIC ANHYDRASES	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	11-82 134,195	0	GEN	212,028
5	R01 GM24686-05 22400	GRAY, WILLIAM R STRUCTURE, FUNCTION, GENETICS OF HISTIDINOL DH'ASE	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	03-83 78,678	1	BIO	108,683
5	R01 GM24688-05 21200	BROWN, WILLIAM E STRUCTURAL STUDIES OF DNA POLYMERASE 1	CARNEGIE-MELLON UNIVERSITY	PITTSBURGH	PENNSYLVANIA	82	12-82 63,676	1	BIO	91,661
5	R01 GM24689-05 22400	LIPSCOMB, JOHN D OXYGENASE ENZYME MECHANISM	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	12-82 54,800	1	PB	72,825
5	R01 GM24704-05 22300	SCHAFER, DAVID E PHYSICAL STUDIES OF ENTEROTOXIN-MEMBRANE INTERACTIONS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83 43,962	1	SSS	68,300
5	R01 GM24707-03 11880	CORREIA, MARIA A REGULATION OF INTESTINAL METABOLISM OF XENOBIOTICS	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	81	11-82 55,695	0	PHRA	72,960
5	R01 GM24711-05 21250	MOSES, ROBB E CELLULAR DNA REPAIR MECHANISMS AND MUTAGENESIS	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	07-83 64,558	3	CPA	87,799

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5 R01 GM24736-05 21400	MURPHY, EDMOND A THEORETICAL ASPECTS OF CLINICAL GENETICS	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	12-82	1	MGN	78,390	114,835
5 R01 GM24748-03 11920	PIZER, RICHARD D THE DYNAMICS OF CRYPTATE FORMATION	BROOKLYN COLLEGE	NEW YORK	NEW YORK	82	12-82	0	MCHB	17,756	28,694
2 R01 GM24749-13 22300	EISENMAN, GEORGE ION PERMEATION IN CHANNELS, CARRIERS AND NERVES	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	06-83	4	PHY	58,888	78,096
5 R01 GM24751-06 21750	SQUIRES, CATHERINE L FUSION OF THE RIBOSOMAL RNA PROMOTOR TO OTHER OPERONS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	03-83	1	MBC	59,477	99,034
5 R01 GM24756-05 21700	RUBENSTEIN, IRWIN MOLECULAR ORGANIZATION OF THE ZEIN MULTIGENE FAMILY	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	07-83	3	GEN	70,680	98,245
2 R01 GM24760-04 22500	RUPLEY, JOHN A MACROMOLECULAR SOLVATION	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	11-82	4	BBCA	59,930	84,840
5 R01 GM24764-05 21700	GAREN, ALAN HORMONAL CONTROLS OF DROSOPHILA DEVELOPMENT	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	12-82	3	GEN	72,092	113,905
5 R01 GM24765-03 22400	BYERS, LARRY D LIGAND INDUCED CHANGES IN MULTI-SUBUNIT ENZYMES	TULANE UNIVERSITY OF LOUISIANA	NEW ORLEANS	LOUISIANA	81	11-82	0	BIO	25,769	36,504
5 R01 GM24771-05 21750	HASTIE, NICHOLAS D REPETITIVE DNA SEQUENCES IN THE MOUSE GENOME	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	12-82	1	CTY	63,389	90,362
2 R01 GM24778-04A1 21200	FARBER, ROSANN A GENETIC STUDIES ON MUTATION IN NEAR-DIPLOID CELLS	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	08-83	2	MGN	60,000	98,744
5 R01 GM24781-05 11780	MITCHELL, ALLEN A INTENSIVE DRUG SURVEILLANCE IN HOSPITALIZED CHILDREN	CHILDREN'S HOSPITAL MEDICAL CENTER	BOSTON	MASSACHUSETTS	82	04-83	0	EDC	295,302	448,855
2 R01 GM24784-06 22450	SCARBOROUGH, GENE A ENERGY TRANSDUCTION IN NEUROSPORA PLASMA MEMBRANES	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	05-83	4	SSS	101,937	132,800

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5	R01 GM24792-05 22300	DAHLQUIST, FREDERICK W ENERGETICS AND DYNAMICS OF LIPID PROTEIN INTERACTIONS	UNIVERSITY OF OREGON	EUGENE	OREGON	82	12-82	3	BBCB		66,462	87,749
5	R01 GM24795-05 22300	ROBINSON, NEAL C HYDROPHOBIC ASSOCIATIONS OF MEMBRANE COMPLEXES	UNIVERSITY OF TEXAS HLTH SCI CTR SAN ANT	SAN ANTONIO	TEXAS	82	12-82	3	PB		54,283	73,441
5	R01 GM24797-05 22200	HERSCHMAN, HARVEY R INITIATION OF CELLULAR PROLIFERATION	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	12-82	2	CTY		80,717	105,429
2	R01 GM24798-04 21250	TOPAL, MICHAEL D MOLECULAR BASIS OF ENVIRONMENTALLY INDUCED MUTATIONS	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	03-83	4	CPA		66,306	87,613
5	R01 GM24800-05 22250	EDELSTEIN, STUART J STRUCTURE AND ASSEMBLY OF TUBULIN	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	01-83	3	CBY		57,908	90,743
5	R01 GM24813-03 22500	FIAT, DANIEL OXYGEN-17 NMR STUDIES OF PEPTIDE CONFORMATION	UNIVERSITY OF ILLINOIS MEDICAL CENTER	CHICAGO	ILLINOIS	80	11-82	0	BBCB		49,190	79,196
3	R01 GM24813-03S1 22500	FIAT, DANIEL OXYGEN-17 NMR STUDIES OF PEPTIDE CONFORMATION	UNIVERSITY OF ILLINOIS MEDICAL CENTER	CHICAGO	ILLINOIS	81	11-82	0	BBCB		12,147	19,071
2	R01 GM24821-04 22410	LENNARZ, WILLIAM J ENZYMATIC CONVERSION OF PROTEINS TO GLYCOPROTEINS	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	03-83	2	PBC		77,052	105,428
5	R01 GM24825-05 21320	LEVIN, DANIEL H CONTROL OF PROTEIN SYNTHESIS BY DOUBLE-STRANDED RNA	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	12-82	3	PC		79,626	128,219
5	R01 GM24832-06 11920	OLAH, GEORGE A HYDROCARBONS & THEIR DERIVATIVES AS BIOALKYLATING AGENTS	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	06-83	0	BBCA		93,050	142,367
2	R01 GM24834-06 AI 13410	HENSON, PETER M RELEASE OF INJURIOUS CONSTITUENTS FROM CELLS	NATIONAL JEWISH HOSPITAL & RESEARCH CTR	DENVER	COLORADO	82	06-83	4	ALY		100,522	142,028
5	R01 GM24840-05 22300	OHKI, SHINPEI CELL FUSION IN MODEL AND BIOLOGICAL MEMBRANE SYSTEMS	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	82	03-83	1	BBCB		50,383	73,286

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5	R01 GM24844-05 11860	HUH, MARTIN M PHARMACOLOGY OF BIOGENIC AMINE METHYLTRANSFERASES	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	81	03-83	0	PHRA		59,541	88,002
5	R01 GM24852-03 22500	GLICKSON, JERRY D NMR TECHNIQUES FOR DELINEATING PEPTIDE CONFORMATIONS	UNIVERSITY OF ALABAMA IN BIRMINGHAM	BIRMINGHAM	ALABAMA	81	11-82	0	BBCA		42,348	57,170
2	R01 GM24862-04	STEVENS, EUGENE S CHARACTERIZATION OF BIOPOLYMERS BY VACUUM UV CD	STATE UNIVERSITY NEW YORK BINGHAMTON	BINGHAMTON	NEW YORK	82	03-83	2	BBCA		40,422	57,916
3	R01 GM24862-04S1 22410	STEVENS, EUGENE S NIGMS SHARED INSTRUMENTATION GRANT	STATE UNIVERSITY NEW YORK BINGHAMTON	BINGHAMTON	NEW YORK	82	03-83	0	SSS		40,200	40,200
5	R01 GM24864-08 21100	PARTHASARATHY, RENGACHARY STRUCTURE AND FUNCTION OF MODIFIED NUCLEOSIDES OF RNA	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	11-82	0	BBCA		39,210	53,163
2	R01 GM24866-04A1 13200	YEH, JAY Z MOLECULAR MECHANISM OF LOCAL ANESTHETIC ACTION	NORTHWESTERN UNIVERSITY	CHICAGO	ILLINOIS	82	06-83	2	PHY		50,401	63,791
5	R01 GM24872-06 21320	MEISLER, MIRIAM H GENETIC REGULATION OF MOUSE ENZYMES	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	05-83	3	MGN		72,133	113,970
5	R01 GM24878-03 22250	BURCHILL, BROWER R ROLE OF THE CILIATE CORTEX IN METABOLIC REGULATION	UNIVERSITY OF KANSAS LAWRENCE	LAWRENCE	KANSAS	81	12-82	0	CBY		22,680	30,051
5	R01 GM24887-05 22450	HATEFI, YOUSSEF ELECTRON TRIBUTARIES OF THE RESPIRATORY CHAIN	SCRIPPS CLINIC AND RESEARCH FOUNDATION	LA JOLLA	CALIFORNIA	82	07-83	3	SSS		66,840	110,219
5	R01 GM24893-13 22500	SCHERAGA, HAROLD A MOTION AND PROXIMITY RELATIONS IN POLYPEPTIDES	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	03-83	3	BBCB		78,440	118,022
5	R01 GM24900-05 13420	AKESON, WAYNE H EXERCISE EFFECTS ON TENDON REPAIR	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	81	03-83	0	SSS		63,052	82,598
2	R01 GM24901-06 13410	PETERS, RICHARD M INTERSTITIAL TISSUE AND ONCOTIC PRESSURE IN TRAUMA	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	06-83	4	SAT		88,706	117,571

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5	R01 GM24908-05 22400	MATTHEWS, ROWENA G REGULATION OF FOLATE METABOLISM	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	03-83	3	BIO		60,077	93,762
5	R01 GM24913-05 22400	WOOD, HARLAND G UTILIZATION OF CO2 AND THE TOTAL SYNTHESIS OF ACETATE	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	82	03-83	0	BIO		69,775	97,561
5	R01 GM24914-08 22600	BEVERIDGE, DAVID L SOLVENT EFFECTS ON BIOMOLECULAR STRUCTURE AND PROCESS	HUNTER COLLEGE	NEW YORK	NEW YORK	82	05-83	1	BBCB		93,650	149,453
5	R01 GM24915-21 21200	GOODGAL, SOL H TRANSFORMATION IN HAEMOPHILUS	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	06-83	2	MBC		82,337	134,231
5	R01 GM24918-05 12840	DEUTSCH, MARTIN BIOLOGICAL CRYSTALLOGRAPHY, A PRECISION AREA DETECTOR	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	03-83	1	BBCB		78,386	122,531
5	R01 GM24936-05 13200	PARMENTIER, JAMES L MODE OF ACTION OF VOLATILE ANESTHETICS	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	03-83	1	SAT		73,680	110,520
5	R01 GM24943-05 22200	HORVITZ, HOWARD R CONTROL OF CELL DIVISION IN THE NEMATODE C ELEGANS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	03-83	3	CBY		40,725	57,001
5	R01 GM24949-05 21320	GROSS, MARTIN TRANSLATIONAL CONTROL OF PROTEIN SYNTHESIS BY HEMIN	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	08-83	3	PBC		54,260	91,009
2	R01 GM24950-07 21200	KOWALSKI, DAVID STUDY OF LIMITED ENZYMATIC CLEAVAGE OF NATIVE DNA	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	81	05-83	0	BIO		40,764	57,732
5	R01 GM24951-08 22300	KEANA, JOHN F NEW LABELS FOR STUDYING MEMBRANE PROTEINS	UNIVERSITY OF OREGON	EUGENE	OREGON	82	05-83	1	BBCB		71,331	95,865
5	R01 GM24956-05 21750	BARNES, WAYNE M HISTIDINE OPERON: GENETIC CONTROL AND DNA SEQUENCE	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	12-82	3	MG		74,185	113,887
2	R01 GM24958-04 22250	PURICH, DANIEL L MOLECULAR MECHANISMS OF MICROTUBULE INTERACTIONS	UNIVERSITY OF CALIFORNIA SANTA BARBARA	SANTA BARBARA	CALIFORNIA	82	05-83	2	CBY		69,486	87,818

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	5 R01 GM24960-05 21780	SHAPIRO, JAMES A DNA INSERTION MECHANISMS: TRANSPOSONS AND CARCINOGENS	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	12-82	3	MG		115,345	180,237
	5 R01 GM24963-05 21320	SPREMULLI, LINDA L MECHANISM OF PROTEIN BIOSYNTHESIS IN CHLOROPLASTS	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	03-83	3	PC		55,116	76,150
	5 R01 GM24967-03 22400	AULD, DAVID S LOW TEMPERATURE ENZYME DYNAMICS	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	08-83	1	BBCA		31,235	48,414
	5 R01 GM24971-05 22300	MC LAUGHLIN, STUART G DIVALENT CATIONS AND MEMBRANES	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	08-83	1	BBCB		87,327	119,074
	5 R01 GM24979-05 11790	HOSTETLER, KARL Y PATHOGENESIS OF DRUG-INDUCED LIPIDOSIS	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	03-83	3	PC		70,571	84,473
	5 R01 GM24981-03 21320	HAMILTON, MARY G SUBFRACTIONATION OF RAT LIVER RIBOSOMAL SUBUNITS	SLOAN-KETTERING INSTITUTE FOR CANCER RES	NEW YORK	NEW YORK	81	12-82	0	BBCA		45,805	67,791
	2 R01 GM24983-04 21320	THOMPSON, ROBERT C ACCURACY OF PROTEIN BIOSYNTHESIS	TEMPLE UNIVERSITY	PHILADELPHIA	PENNSYLVANIA	82	04-83	4	PC		69,426	97,079
	5 R01 GM24989-05 22200	VALLEE, BERT L THE FUNCTION AND DETECTION OF ZINC IN CELL BIOLOGY	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	05-83	0	BMT		108,583	168,304
M	5 P50 GM24990-05 13300	CARRICO, C JAMES ORGAN AND CELLULAR RESPONSE TO TRAUMA AND BURNS	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	07-83	3	SRC		371,676	435,746
	5 R01 GM24992-17 22250	BURTON, PAUL R EM STUDIES OF SPERM AND NERVE: FOCUS ON MICROTUBULES	UNIVERSITY OF KANSAS LAWRENCE	LAWRENCE	KANSAS	81	11-82	0	CBY		30,340	40,013
	5 R01 GM24994-04 12910	O'BRIEN, WILLIAM D, JR ULTRASONIC PROPAGATION PROPERTIES IN INTACT TISSUE	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	81	12-82	0	RAD		96,636	126,206
	5 R01 GM25002-05 22300	ZADUNAISKY, JOSE A CHLORIDE TRANSPORT AND OSMOREGULATION	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82	03-83	0	PHY		53,891	80,567

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5 R01 GM25018-05 22500	JAMES, THOMAS L NMR RELAXATION STUDIES OF MOTION IN BIOPOLYMERS	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	03-83	1	BBCB	53,000	68,883
2 R01 GM25022-04 21200	SARKAR, NILIMA INVOLVEMENT OF RNA IN DNA SYNTHESIS	BOSTON BIOMEDICAL RESEARCH INSTITUTE	BOSTON	MASSACHUSETTS	82	03-83	2	BIO	54,248	77,770
5 R01 GM25027-05 11780	CHUNG, LELAND W NEONATAL IMPRINTING MECHANISMS AND DEVELOPMENT	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	07-83	1	PHRA	66,739	93,368
2 R01 GM25030-04 22300	WILSON, DAVID B ISOLATION AND CHARACTERIZATION OF THE S GENE PRODUCT	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	06-83	2	MBC	64,549	93,873
5 R01 GM25047-05 22300	DOWHAN, WILLIAM MEMBRANE PROTEIN BIOSYNTHESIS & ASSEMBLY	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	03-83	1	MBC	59,344	81,515
5 R01 GM25052-05 22450	LEIGH, JOHN S, JR SPATIAL ORGANIZATION OF ELECTRON TRANSPORT SYSTEMS	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	03-83	3	BMT	117,614	187,702
5 R01 GM25055-05 22400	ABBOTT, MITCHEL T PYRIMIDINE & PROLYL ALPHA-KETOGLUTARATE DIOXYGENASES	SAN DIEGO STATE UNIVERSITY	SAN DIEGO	CALIFORNIA	82	04-83	0	BIO	33,111	46,687
5 R01 GM25062-05 22250	BORISY, GARY G MECHANISM AND CONTROL OF MICROTUBULE ASSEMBLY	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	03-83	0	MBY	85,860	119,820
5 R01 GM25076-05 12990	LUCAS, JOE CHROMOSOMAL FLOW CYTOMETRY: DNA AND CENTROMERES	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	03-83	0	SSS	108,441	183,591
5 R01 GM25078-05 13420	TRUNKEY, DONALD D INTRACELLULAR MEDIATORS DURING SEPTIC AND BURN SHOCK	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	03-83	0	SGYA	70,254	92,033
5 R01 GM25080-05 22200	KLEIN, CLAUDETTE BIOGENESIS OF A CHEMOTACTIC SYSTEM IN D. DISCOIDEUM	ST. LOUIS UNIVERSITY	SAINT LOUIS	MISSOURI	82	08-83	1	CP	74,075	110,363
5 R01 GM25101-05 21600	SEDAT, JOHN W STRUCTURAL DETERMINATION OF INTERPHASE CHROMOSOMES	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	03-83	1	CTY	60,764	78,376

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5	R01 GM25103-05 21600	YOUNG, MICHAEL W GENE ORGANIZATION AND FUNCTION IN D. MELANOGASTER	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	03-83	1	GEN	62,892	96,728
5	R01 GM25114-05 22300	CHUA, NAM-HAI TRANSFER OF PROTEINS INTO ORGANELLES	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	03-83	0	MBY	104,801	160,108
2	R01 GM25119-06 21320	JEFFERY, WILLIAM R STRUCTURE AND FUNCTION OF MESSENGER RIBONUCLEOPROTEIN	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	07-83	4	MBY	79,481	106,249
5	R01 GM25120-06 22250	HEPLER, PETER K ROLE OF CALCIUM AND MEMBRANES IN MITOSIS	UNIVERSITY OF MASSACHUSETTS AMHERST	AMHERST	MASSACHUSETTS	82	08-83	2	CBY	67,862	97,230
5	R01 GM25122-05 11920	RAKOWSKI-DU BOIS, MARY C SYNTHESES AND STUDIES OF IRON-MOLYBDENUM COMPLEXES	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	02-83	1	BMT	40,001	55,801
5	R01 GM25125-03 22300	OJAKIAN, GEORGE K FREEZE-ETCH STUDIES OF DEVELOPING TIGHT JUNCTIONS	DOWNSTATE MEDICAL CENTER	NEW YORK	NEW YORK	80	03-83	0	CBY	33,017	47,421
3	R01 GM25125-0351 22300	OJAKIAN, GEORGE K FREEZE-FRACTURE ELECTRON MICROSCOPY	DOWNSTATE MEDICAL CENTER	NEW YORK	NEW YORK	80	03-83	0	SSS	82,500	82,500
5	R01 GM25136-05 11760	TRAGER, WILLIAM F PRODUCT RATIOS AND MICROSOMAL MULTIPLICITY	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	03-83	1	PHRA	53,555	71,371
5	R01 GM25137-03 21750	MOWSHOWITZ, DEBORAH B CONTROL OF PERIODIC ENZYME SYNTHESIS IN EUKARYOTES	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	81	02-83	0	GEN	35,012	53,060
5	R01 GM25144-05 22300	HONG, FELIX T PHOTOBIOLOGICAL SYSTEMS AND MEMBRANE INTERFACES	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	82	11-82	0	MBY	49,293	64,084
5	R01 GM25150-05 11870	ARORA, SATISH K STRUCTURAL INVESTIGATIONS OF MODE OF ACTION OF DRUGS	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	02-83	0	BBCA	31,999	45,759
5	R01 GM25151-05 21100	HEARST, JOHN E NUCLEIC ACID INTERACTIONS WITH SYNTHETIC PSORALENS	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	03-83	1	MCHA	78,230	102,481

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5	R01 GM25152-03 22300	HASCHEMEYER, RUDY H GAMMA-GLUTAMYL TRANSPEPTIDASE--MEMBRANE BOUND ENZYMES	CORNELL UNIVERSITY MEDICAL CENTER	NEW YORK	NEW YORK	81	11-82 48,962	0	BBCB	74,838
5	R01 GM25154-05 22400	SILVERMAN, DAVID N CATALYTIC MECHANISM OF CARBONIC ANHYDRASE	UNIVERSITY OF FLORIDA	GAINESVILLE	FLORIDA	82	03-83 70,866	1	PB	102,109
2	R01 GM25157-04 21750	VALENZUELA, PABLO D ROLE OF RNA POLYMERASE SUBUNITS IN GENE TRANSCRIPTION	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	11-82 34,776	4	MBY	45,557
2	R01 GM25158-04A1 22500	SPIRO, THOMAS G RAMAN STUDIES OF FLAVINS AND PYRIDINE COENZYMES	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	03-83 65,550	2	BBCB	98,542
5	R01 GM25168-05 21320	WILHELM, JAMES M PROTEIN SYNTHESIS ERRORS IN EUKARYOTIC CELLS	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	03-83 70,702	3	GEN	112,836
5	R01 GM25172-05 11920	KADISH, KARL M REDOX REACTIONS OF IRON PORPHYRINS	UNIVERSITY OF HOUSTON AT HOUSTON	HOUSTON	TEXAS	82	07-83 54,527	1	BMT	70,885
5	R01 GM25176-03 21700	BORGIA, PETER T REGULATORY ROLE OF CYCLIC NUCLEOTIDES IN MUCOR	SOUTHERN ILLINOIS UNIVERSITY CARBONDALE	CARBONDALE	ILLINOIS	80	07-83 22,764	0	MBC	30,148
5	R01 GM25177-05 22500	HOROWITZ, PAUL M STRUCTURE-FUNCTION IN THE ENZYME RHODANESE	UNIVERSITY OF TEXAS HLTH SCI CTR SAN ANT	SAN ANTONIO	TEXAS	82	03-83 37,560	1	BBCA	49,406
5	R01 GM25178-05 21600	SQUIRES, CATHERINE L TOTAL DNA SEQUENCES OF RIBOSOMAL RNA CISTRONS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	03-83 87,970	3	MG	146,086
5	R01 GM25181-05 22500	POWERS, JAMES C TRITIATION OF PROTEINS AND OTHER BIOMOLECULES	GEORGIA INSTITUTE OF TECHNOLOGY	ATLANTA	GEORGIA	82	03-83 62,400	0	BBCB	96,720
5	R01 GM25188-05 13420	ROSEN, GERALD M HEPATIC METABOLIC DYSFUNCTION ASSOCIATED WITH TRAUMA	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	03-83 69,824	1	SAT	104,736
2	R01 GM25190-04 22300	LOEW, LESLIE M A CONCERTED SEARCH FOR ELECTROCHROMIC MEMBRANE PROBES	STATE UNIVERSITY NEW YORK BINGHAMTON	BINGHAMTON	NEW YORK	82	11-82 70,473	3	BBCA	95,005

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5	R01 GM25193-05 21480	MILLER, ORLANDO J ANTIBODY PROBES OF CHROMOSOME STRUCTURE	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	03-83	1	MGN	81,787	137,075
5	R01 GM25203-05 21600	HERRICK, GLENN A SOMATIC GENOME ALTERATIONS IN OXYTRICHA FALLAX	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	03-83	1	MBY	79,453	115,207
2	R01 GM25207-04 21750	GREER, HELEN A GENE REGULATION OF HISTIDINE BIOSYNTHESIS IN YEAST	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	11-82	2	GEN	101,250	148,365
5	R01 GM25217-05 22550	DONIACH, SEBASTIAN X-RAY STUDIES OF CA AND TB IONS IN BIOLOGICAL SYSTEMS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	03-83	1	BBCA	43,730	69,093
5	R01 GM25219-03 22500	KRISHNA, N RAMA NMR STUDIES OF T AND B CELL DIFFERENTIATING PEPTIDES	UNIVERSITY OF ALABAMA IN BIRMINGHAM	BIRMINGHAM	ALABAMA	81	12-82	0	BBCB	45,684	61,673
5	R01 GM25232-05 21750	LIS, JOHN T COORDINATE GENE REGULATION IN ANIMAL CELLS	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	03-83	3	GEN	73,703	103,840
5	R01 GM25234-06 22550	SIGLER, PAUL B SPECIFIC MOLECULAR INTERACTIONS AT THE CELL SURFACE	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	08-83	0	BBCB	45,390	76,709
5	R01 GM25236-05 21320	STUBBS, GERALD J STRUCTURE AND ASSEMBLY OF TOBACCO MOSAIC VIRUS	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	03-83	1	BBCB	71,897	116,473
5	R01 GM25240-06 22250	SPUDICH, JAMES A CONTROL OF ASSEMBLY AND INTERACTION OF MYOSIN	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	08-83	3	CTY	86,055	143,363
5	R01 GM25242-04 11930	ABRAMOVITCH, RUDOLPH A BIOLOGICALLY ACTIVE COMPOUNDS FROM N-OXIDES AND YLIDES	CLEMSON UNIVERSITY	CLEMSON	SOUTH CAROLINA	81	12-82	0	MCHA	66,986	97,919
2	R01 GM25243-05 HD 22200	WARD, SAMUEL GENETIC SPECIFICATION OF CELL MORPHOLOGY	CARNEGIE INSTITUTION OF WASHINGTON D C BALTIMORE	BALTIMORE	MARYLAND	82	08-83	4	CBY	59,695	95,468
5	R01 GM25250-06 22450	TZAGOLOFF, ALEXANDER A BIOSYNTHESIS OF CYTOCHROME OXIDASE	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	08-83	0	BIO	35,483	60,215

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5	R01 GM25252-04 11930	LAMBETH, DAVID O SYNTHESIS AND PROPERTIES OF S-ALKYLISOTHIAZOLIDINES	UNIVERSITY OF NORTH DAKOTA	GRAND FORKS	NORTH DAKOTA	81	12-82	0	MCHA		18,059	24,610
5	R01 GM25254-13 21320	DUDOCK, BERNARD S SEQUENCE ANALYSIS OF BIOLOGICALLY ALTERED TRNA	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	12-82	0	PC		49,167	73,141
5	R01 GM25255-05 21700	DOANE, WINIFRED W GENETIC REGULATORY MECHANISMS IN CELLULAR DIFFERENTIATIO	ARIZONA STATE UNIVERSITY	TEMPE	ARIZONA	82	12-82	1	GEN		102,773	153,669
5	R01 GM25256-06 22300	MUELLER, PAUL H RECONSTITUTION AND ANALYSIS OF MEMBRANE TRANSPORT	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	08-83	1	BBCB		61,202	100,008
5	R01 GM25261-04 21320	SCHMIDT, PAUL G NMR OF TRANSFER RNA	OKLAHOMA MEDICAL RESEARCH FOUNDATION	OKLAHOMA CITY	OKLAHOMA	81	03-83	0	BBCB		26,913	37,005
5	R01 GM25271-05 12100	GEISSER, SEYMOUR SAMPLE REUSE AND PREDICTIVE METHODS	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	07-83	1	SSS		43,797	60,878
5	R01 GM25273-05 21600	CECH, THOMAS R CHROMATIN STRUCTURE OF A TRANSCRIPTION UNIT	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	03-83	1	MBY		63,567	88,281
5	R01 GM25277-05 22300	TOSTESON, DANIEL C ION TRANSPORT ACROSS LIPID BILAYER MEMBRANES	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	06-83	2	PHY		72,438	140,876
5	R01 GM25280-11 11470	MANNING, MAURICE DESIGN AND SYNTHESIS OF NEUROHYPOPHYSIAL PEPTIDES	MEDICAL COLLEGE OF OHIO AT TOLEDO	TOLEDO	OHIO	82	06-83	0	MCHA		77,598	120,364
5	R01 GM25286-05 21750	GLASER, GAD STRUCTURE AND CONTROL OF E. COLI ACTIVITY	HEBREW UNIVERSITY OF JERUSALEM	JERUSALEM	ISRAEL	82	07-83	1	MG		50,881	50,881
5	R01 GM25288-02 11920	CHUNG, SUNG-KEE PROBES OF NAD-DEPENDENT DEHYDROGENASE REACTION	TEXAS AGRI AND MECH UNIV COLLEGE STATION	COLLEGE STATION	TEXAS	81	10-82	0	BMT		21,976	28,793
2	R01 GM25295-07 22500	VANDERJAGT, DAVID L BILIRUBIN TRANSPORT PROTEINS	UNIVERSITY OF NEW MEXICO ALBUQUERQUE	ALBUQUERQUE	NEW MEXICO	82	11-82	2	BIO		73,860	98,186

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5	R01 GM25303-05 11910	TUFARIELLO, JOSEPH J ALKALOID SYNTHESIS	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	82	08-83	1	MCHA		76,358	112,377
2	R01 GM25308-05 12820	RECHNITZ, GARRY A BIOANALYSIS WITH SELECTIVE MEMBRANE ELECTRODES	UNIVERSITY OF DELAWARE	NEWARK	DELAWARE	82	06-83	4	BMT		53,219	84,086
5	R01 GM25312-03 12820	RECHNITZ, GARRY A BIO-SELECTIVE ELECTRODES USING LIVING BACTERIAL CELLS	UNIVERSITY OF DELAWARE	NEWARK	DELAWARE	81	11-82	0	BMT		22,486	32,155
5	R01 GM25323-05 22400	MOORE, STANFORD BIOCHEMISTRY OF NUCLEASES	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	06-83	0	PBC		82,761	127,655
5	R01 GM25326-05 21780	KLECKNER, NANCY E ILLEGITIMATE RECOMBINATION BY DRUG RESISTANCE ELEMENTS	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	06-83	3	MG		93,118	143,402
5	R01 GM25327-05 21700	JACOBS-LORENA, MARCELO BIOCHEMICAL STUDIES OF DROSOPHILA OOGENESIS	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	82	03-83	1	MBY		77,368	116,214
5	R01 GM25329-04 11790	CLARKSON, THOMAS W ANTIDOTES TO HEAVY METAL POISONING	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	12-82	3	TOX		98,146	130,870
2	R01 GM25339-04 21480	WASMUTH, JOHN J GENETIC MAPPING AND CLONING MAMMALIAN GENES	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	11-82	2	MGN		65,170	83,203
2	R01 GM25347-04 22400	GILBERT, HIRAM F ENZYME CATALYSIS OF PROTON TRANSFER FROM CARBON	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	11-82	2	PB		52,939	65,800
5	R01 GM25349-05 22450	SENIOR, ALAN E STRUCTURE OF THE PROTON-ATPASE	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	08-83	3	PB		84,449	139,341
2	R01 GM25364-04 22410	KELLER, RONALD K REGULATION OF GLYCOPROTEIN BIOSYNTHESIS	UNIVERSITY OF SOUTH FLORIDA	TAMPA	FLORIDA	82	11-82	4	PBC		47,612	71,894
5	R01 GM25365-03 21600	ARNHEIM, NORMAN GENETIC AND MOLECULAR STUDIES OF HUMAN AND MOUSE DNA	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	81	06-83	0	GEN		65,545	93,031

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5 R01 GM25373-03 11860	NELSON, WENDEL L METABOLISM OF BETA-ADRENERGIC BLOCKERS-CHEMICAL ASPECTS	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	81	11-82	0	PHRA		39,757	52,934
5 R01 GM25388-05 21750	SPRAGUE, KAREN U CONTROL OF TRNA GENE EXPRESSION IN BOMBYX MORI	UNIVERSITY OF OREGON	EUGENE	OREGON	82	07-83	3	GEN		81,338	114,342
2 R01 GM25399-04 21700	KIDWELL, MARGARET G GENETIC ASPECTS OF HYBRID DYSGENESIS IN DROSOPHILA	BROWN UNIVERSITY	PROVIDENCE	RHODE ISLAND	82	11-82	2	GEN		62,750	97,435
2 R01 GM25417-04 AI 21750	SNUSTAD, D PETER GENETICS OF VIRUS-INDUCED SHUTOFF OF HOST METABOLISM	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	03-83	2	MG		63,381	84,499
2 R01 GM25418-04A1 11890	NELSON, SIDNEY D ALTERATION OF METABOLISM BY STRUCTURAL MODIFICATION	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	03-83	2	PHRA		55,666	73,079
5 R01 GM25422-05 22400	QUE, LAWRENCE, JR NON-HEME IRON DIOXYGENASES: STRUCTURE AND MECHANISM	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	06-83	3	BMT		75,150	106,799
5 R01 GM25431-05 12820	REGNIER, FRED E HIGH PERFORMANCE LIQUID CHROMATOGRAPHY OF PROTEINS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	0[illegible]-83	0	SSS		[illegible]46	90,033
2 R01 GM25432-04 22550	AMZEL, LEON M 3-DIMENSIONAL STRUCTURE OF PROTON TRANSLOCATING ATPASES	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	[illegible]-83	3	BBCB		87,150	116,975
2 R01 GM25434-04A1 21320	SLOBIN, LAWRENCE I CONTROL OF POLYPEPTIDE CHAIN ELONGATION IN EUCARYOTES	UNIVERSITY OF MISSISSIPPI MEDICAL CENTER	JACKSON	MISSISSIPPI	82	06-83	4	PC		63,010	82,955
2 R01 GM25435-04 22500	CHOTHIA, CYRUS THE THREE-DIMENSIONAL STRUCTURE OF PROTEIN MOLECULES	UNIVERSITY OF LONDON	LONDON	UNITED KINGDOM	82	11-82	2	BBCB		23,957	23,957
5 R01 GM25451-03 21320	WAHBA, ALBERT J PROTEIN SYNTHESIS IN PROKARYOTES AND EUKARYOTES	UNIVERSITY OF MISSISSIPPI MEDICAL CENTER	JACKSON	MISSISSIPPI	80	08-83	0	BIO		46,084	61,954
5 R01 GM25457-05 21200	MC HENRY, CHARLES S REGULATION OF THE SYNTHESIS OF REPLICATION PROTEINS	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	08-83	1	BIO		34,016	45,802

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5	R01 GM25459-05 11940	BERGMAN, ROBERT G C-N BOND FORMATION USING METAL-BASED REAGENTS	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	07-83	3	BMT	80,322	113,977
2	R01 GM25461-05 22250	JACOBSON, BRUCE S PLASMA MEMBRANES INVERTED ON BEADS--ACTIN BINDING	UNIVERSITY OF MASSACHUSETTS AMHERST	AMHERST	MASSACHUSETTS	82	07-83	2	CP	66,417	92,930
5	R01 GM25463-03 22500	HALL, BARRY T PROTEIN FOLDING--THE EFFECT OF SEQUENCE	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	81	11-82	0	BBCA	26,683	36,823
2	R01 GM25478-04 22400	HEHRE, EDWARD J SCOPE AND MECHANISM OF ENZYME-CATALYZED GLYCOSYLATION	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	08-83	4	BIO	71,069	132,188
2	R01 GM25480-04 22450	BABCOCK, GERALD T BIOENERGETIC MECHANISMS IN MULTICENTER ENZYMES	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	03-83	2	BMT	66,796	91,722
5	R01 GM25486-04 22400	FRERMAN, FRANK E ACYL COA DEHYDROGENASES--REGULATION OF BETA-OXIDATION	MEDICAL COLLEGE OF WISCONSIN	MILWAUKEE	WISCONSIN	81	12-82	0	BIO	76,274	91,312
5	R01 GM25487-03 22400	ORNSTON, L NICHOLAS ORIGINS OF METABOLIC DIVERSITY	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	80	11-82	0	BIO	54,323	83,101
3	R01 GM25487-03S1 22400	ORNSTON, L NICHOLAS ORIGINS OF METABOLIC DIVERSITY	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	81	11-82	0	BIO	12,156	19,206
5	R01 GM25494-05 22450	HALL, CAROLE L FATTY ACYL COA DEHYDROGENASE/ELECTRON TRANS FLAVOPROTEIN	GEORGIA INSTITUTE OF TECHNOLOGY	ATLANTA	GEORGIA	82	06-83	1	PB	51,045	78,570
2	R01 GM25498-04 21750	REVZIN, ARNOLD REGULATORY PROTEIN-DNA INTERACTIONS--PHYSICAL STUDIES	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	12-82	2	BBCA	64,778	89,484
5	R01 GM25500-05 21200	DEPEW, RICHARD E BACTERIAL W PROTEINS: BIOCHEMISTRY AND GENETICS	NORTHEASTERN OHIO UNIVERSITIES COLL MED	ROOTSTOWN	OHIO	82	06-83	3	MG	66,367	98,715
5	R01 GM25504-03 13410	BAXTER, CHARLES R LEUKOCYTE FUNCTION IN BURN AND TRAUMA PATIENTS	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	81	11-82	0	SSS	74,795	101,569

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5	R01 GM25505-05 22500	GRIFFIN, ROBERT G NMR STUDIES OF LIPID ASSOCIATION	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	06-83	2	BBCB		70,540	97,825
5	R01 GM25508-05 21200	CAMPBELL, JUDITH L ENZYMATIC MECHANISMS OF DNA REPLICATION	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	08-83	3	MG		64,814	95,445
2	R01 GM25510-04 21600	GETZ, MICHAEL J REGULATION OF MRNA ABUNDANCE	MAYO FOUNDATION	ROCHESTER	MINNESOTA	82	03-83	2	MBY		91,300	123,220
2	R01 GM25512-04A1 21320	SCHWEIZER, MARTIN P CARBON-13 NMR STUDIES OF TRNA SYNTHETASE INTERACTIONS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	06-83	2	BBCA		65,937	88,166
5	R01 GM25515-05 11760	ORTIZ DE MONTELLANO, PAUL R SELECTIVE DESTRUCTION OF CYTOCHROME P-450 BY DRUGS	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	06-83	1	PHRA		68,261	86,477
2	R01 GM25521-04 11910	POULTER, C DALE STUDIES OF STEROL BIOSYNTHESIS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	03-83	2	BNP		70,798	99,417
2	R01 GM25522-04 21280	COHEN, SEYMOUR S POLYAMINES IN VIRUS INFECTION OF CHLOROPLASTS	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	08-83	2	MBC		63,870	93,202
5	R01 GM25526-05 21200	BIRD, ROBERT E CONTROL OF PLASMID DNA REPLICATION IN E COLI	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	07-83	3	MG		59,958	93,543
5	R01 GM25527-05 22300	AGABIAN, NINA M REGULATION OF CELL SURFACE DEVELOPMENT IN CAULOBACTER	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	06-83	3	MBC		75,299	99,711
2	R01 GM25530-04A1 21200	BEATTIE, KENNETH L A BIOCHEMICAL STUDY OF ERROR-PRONE DNA SYNTHESIS	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	06-83	2	MG		95,994	118,691
5	R01 GM25532-05 21750	WARNER, JONATHAN R RIBOSOMAL PROTEIN GENES OF SACCHAROMYCES CEREVISIAE	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	07-83	3	GEN		146,257	248,324
5	R01 GM25538-03 12200	KATONA, PETER G OPTIMAL AUTOMATED CONTROL OF PHYSIOLOGICAL SYSTEMS	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	81	07-83	0	SGYB		42,532	64,223

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2	R01 GM25553-04A1 21700	ANGERER, ROBERT C IN SITU LOCALIZATION OF INFORMATIONAL EMBRYO RNAS	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	02-83	4	MBY		118,372	186,735
2	R01 GM25561-04A1 13420	EHRLICH, H PAUL THE CONTROL AND MODIFICATION OF SCAR FORMATION	MASSACHUSETTS GENERAL HOSPITAL	BOSTON	MASSACHUSETTS	82	03-83	2	SAT		56,636	69,489
5	R01 GM25562-04 21250	BOYD, JAMES B DNA SYNTHESIS IN MUTAGEN-SENSITIVE DROSOPHILA STRAINS	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	12-82	0	GEN		57,762	75,668
5	R01 GM25565-05 21280	HELLING, ROBERT B CHLOROPLAST DNA FROM EUGLENA	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	06-83	0	GEN		43,475	68,691
5	R01 GM25578-05 21400	QUINN, WILLIAM G, JR GENETIC ANALYSIS OF LEARNING AND MEMORY IN DROSOPHILA	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	06-83	1	GEN		65,009	100,119
2	R01 GM25588-04 22200	BERGER, EDWARD A A SURFACE LECTIN AND CELL COHESION IN DICTYOSTELIUM	WORCESTER FDN FOR EXPER BIOLOGY	SHREWSBURY	MASSACHUSETTS	82	03-83	2	CP		79,574	129,716
5	R01 GM25592-03 12840	CAMPBELL, IAIN M RADIOGAS CHROMATOGRAPH/QUADRUPOLE MASS SPECTROMETY	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	81	12-82	0	BMT		49,701	75,546
2	R01 GM25604-04 21200	KLINE, BRUCE C GENETICS OF PLASMID REPLICATION AND INCOMPATIBILITY	MAYO FOUNDATION	ROCHESTER	MINNESOTA	82	11-82	2	MG		68,989	88,304
2	R01 GM25605-04 21750	JACKSON, JULIUS H CONTROL OF RELATED DISPERSED GENES AND GENE PRODUCTS	MEHARRY MEDICAL COLLEGE	NASHVILLE	TENNESSEE	82	11-82	2	MG		67,828	78,514
5	R01 GM25617-05 21750	BOURGEOIS-COHN, SUZANNE MECHANISMS OF PROTEIN-NUCLEIC ACID INTERACTIONS	SALK INSTITUTE FOR BIOLOGICAL STUDIES	LA JOLLA	CALIFORNIA	82	08-83	3	MG		96,933	155,295
2	R01 GM25621-04 21200	GUMPORT, RICHARD I STUDIES WITH T4 RNA LIGASE	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	11-82	4	MG		77,152	101,453
3	R01 GM25624-05 21700	HICKS, JAMES B REGULATION AND INTERCONVERSION OF MATING TYPES IN YEAST	COLD SPRING HARBOR LABORATORY	COLD SPRING HARB	NEW YORK	82	06-83	3	GEN		119,885	211,172

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5	R01 GM25638-05 22250	WILLIAMS, ROBLEY C, JR ASSEMBLY AND DISASSEMBLY OF CYTOPLASMIC MICROTUBULES	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	06-83	3	BBCB		71,658	114,149
2	R01 GM25644-05 21700	NEWTON, AUSTIN GENETICS OF CELL CYCLE AND DEVELOPMENT IN CAULOBACTER	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	06-83	4	MG		65,039	104,104
2	R01 GM25648-04 22300	DOUGLAS, MICHAEL G ASSEMBLY OF THE YEAST MITOCHONDRIAL ATPASE COMPLEX	UNIVERSITY OF TEXAS HLTH SCI CTR SAN ANT	SAN ANTONIO	TEXAS	82	11-82	4	GEN		88,557	115,722
5	R01 GM25652-05 21750	MORSE, DANIEL E GENETIC REGULATION BY CYCLIC AMP IN TETRAHYMENA	UNIVERSITY OF CALIFORNIA SANTA BARBARA	SANTA BARBARA	CALIFORNIA	82	06-83	1	CP		73,436	101,976
5	R01 GM25653-05 22250	SANGER, JOSEPH W ANALYSIS OF CELL DIVISION AND CELL MOTILITY	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	08-83	2	CBY		88,271	144,217
5	R01 GM25654-04 22400	OLIVERA, BALDOMERO M PYRIDINE NUCLEOTIDES--TURNOVER AND REGULATION	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	01-83	1	MBY		33,707	48,650
5	R01 GM25661-05 22300	SNELL, WILLIAM J CELL SURFACE RECOGNITION AND CELL INTERACTIONS	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	06-83	2	CBY		55,432	74,897
5	R01 GM25662-05 22300	ROTHMAN, JAMES E BIOCHEMISTRY OF CLATHRIN-COATED VESICLES	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	07-83	1	CBY		85,013	131,421
2	R01 GM25663-04 21600	SMALL, ENOCH W FLUORESCENE STUDIES OF NUCLEOSOME STRUCTURAL CHANGES	OREGON STATE UNIVERSITY	CORVALLIS	OREGON	82	11-82	2	BBCA		56,220	72,768
5	R01 GM25666-05 13410	URBANIAK, JAMES R TISSUE INJURY, REVASCULARIZATION AND TRANSPLANTATION	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	02-83	1	AFY		101,474	152,211
5	R01 GM25671-05 21200	ROSENBERG, JOHN M STRUCTURE AND FUNCTION OF ECORI ENDONUCLEASE	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	06-83	1	BBCA		53,899	81,146
5	R01 GM25672-05 22550	STOUT, CHARLES D CRYSTAL STRUCTURES OF AZOTOBACTER PROTEINS	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	07-83	3	BBCB		70,860	106,667

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5	R01 GM25678-05 21700	KLAR, AMAR J MOLECULAR MECHANISMS OF DIFFERENTIATION	COLD SPRING HARBOR LABORATORY	COLD SPRING HARB	NEW YORK	82	06-83	3	GEN		88,675	155,587
2	R01 GM25680-04 21750	CARUTHERS, MARVIN H CHEMICAL AND ENZYMATIC STUDIES ON GENE CONTROL REGIONS	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	11-82	4	BNP		71,495	97,411
5	R01 GM25683-04 22450	MOUDRIANAKIS, EVANGELOS N ENZYMOLOGY OF MITOCHONDRIAL ATP SYNTHESIS	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	04-83	1	BIO		59,360	86,565
5	R01 GM25686-05 22300	TOSTESON, DANIEL C MEMBRANES IN HYPERTENSION AND OTHER SYNDROMES	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	06-83	0	PHY		78,168	153,053
5	R01 GM25690-04 22410	CHUNG, ALBERT E CHARACTERIZATION BASEMENT MEMBRANE GLYCOPROTEINS	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	12-82	2	CTY		66,815	101,559
5	R01 GM25692-03 21750	MC REYNOLDS, LARRY A DEVELOPMENT OF VECTOR FOR EUKARYOTIC GENE TRANSFER	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	81	09-82	0	GEN		57,074	79,208
5	R01 GM25693-05 22300	MAUZERALL, DAVID CHARGE TRANSFER ACROSS INTERFACES OF BIOLOGICAL SYSTEMS	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	06-83	1	BBCA		66,609	104,576
2	R01 GM25697-04 22400	MILLER, JON P MAPPING CAMP AND CGMP BINDING SITES ON PROTEIN KINASES	SRI INTERNATIONAL	MENLO PARK	CALIFORNIA	82	11-82	2	BIO		75,335	146,453
5	R01 GM25698-16 22300	GRIFFITH, O HAYES SPIN LABELING AND MEMBRANE STRUCTURE	UNIVERSITY OF OREGON	EUGENE	OREGON	82	05-83	0	BBCA		98,633	133,944
2	R01 GM25703-04 22500	SCHMIDT, PAUL G ACID PROTEASE STRUCTURE, DYNAMICS AND MECHANISM	OKLAHOMA MEDICAL RESEARCH FOUNDATION	OKLAHOMA CITY	OKLAHOMA	82	11-82	2	BBCB		44,380	60,908
5	R01 GM25727-03 11930	HALL, STAN S GLYOXALASE I INHIBITOR STUDIES AND ANTITUMOR AGENTS	RUTGERS THE STATE UNIV NEWARK	NEWARK	NEW JERSEY	81	06-83	0	BMT		33,739	53,308
5	R01 GM25728-04 22300	STADLER, JOAN K MUTANTS OF MEMBRANE FUNCTION IN MAMMALIAN CELLS	IOWA STATE UNIVERSITY OF SCIENCE & TECH	AMES	IOWA	82	11-82	1	MGN		50,450	62,304

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2	R01 GM25729-04 21100	GREENE, PATRICIA J SEQUENCE-SPECIFIC DNA-PROTEIN INTERACTIONS	UNIVERSITY OF CALIFORNIA	SAN FRANCISCO SAN FRANCISCO	CALIFORNIA	82	11-82	2	BIO	50,000	65,500
5	R01 GM25735-04 22400	CRAWFORD, IRVING P MUTATIONAL PERTURBATION OF SUBUNIT INTERACTIONS	UNIVERSITY OF IOWA	IOWA CITY	IOWA	81	03-83	0	MBC	56,916	78,430
5	R01 GM25738-03 11860	GRAY, ROBERT D CARBON MONOXIDE BINDING TO CYTOCHROMES P-450 & P-448	UNIVERSITY OF LOUISVILLE	LOUISVILLE	KENTUCKY	81	06-83	0	BMT	33,182	52,759
5	R01 GM25753-04 13420	ROSEN, GERALD M POST TRAUMATIC FATTY ACID METABOLISM AND CELLULAR INJURY	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	11-82	1	SGYA	83,617	125,426
5	R01 GM25757-05 11920	BRYANT, ROBERT G ALKALINE EARTH ION NUCLEAR MAGNETIC RESONANCE	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	07-83	1	BMT	72,169	100,315
5	R01 GM25759-03 13410	ROBINSON, WILLIAM A RED AND WHITE BLOOD CELL PRODUCTION IN BURNED HUMANS	UNIVERSITY OF COLORADO HLTH SCIENCES CTR	DENVER	COLORADO	82	03-83	2	SAT	76,361	95,069
2	R01 GM25765-05 NS 22400	KLINMAN, JUDITH P DOPAMINE-B-HYDROXYLASE: MOLECULAR MECHANISMS	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	05-83	2	BIO	102,463	128,629
5	R01 GM25766-22 22500	HILL, ROBERT L STRUCTURE AND FUNCTION OF PROTEINS	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	08-83	0	PC	161,831	241,247
5	R01 GM25781-03 11890	JOLLOW, DAVID J ACETAMINOPHEN-INDUCED LIVER NECROSIS	MEDICAL UNIVERSITY OF SOUTH CAROLINA	CHARLESTON	SOUTH CAROLINA	81	11-82	0	PHRA	89,337	117,031
5	R01 GM25794-03 21600	ISENBERG, IRVIN STUDY OF HMG AND A24 PROTEINS	OREGON STATE UNIVERSITY	CORVALLIS	OREGON	81	07-83	0	PC	36,425	46,948
5	R01 GM25799-03 11910	HUTCHINSON, C RICHARD STEREOCHEMISTRY OF POLYKETIDE ANTIBIOTIC BIOSYNTHESIS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	81	12-82	0	MCHA	19,628	27,269
5	R01 GM25807-03 11880	OIE, SVEIN DRUG DISPOSITION IN RENAL FAILURE PATIENTS	UNIVERSITY OF CALIFORNIA	SAN FRANCISCO SAN FRANCISCO	CALIFORNIA	81	11-82	0	PHRA	44,193	57,893

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2	R01 GM25810-04 12400	LANGER, ROBERT S A SYSTEM FOR HEPARIN REMOVAL	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	12-82	2	5B		89,849	132,289
2	R01 GM25813-04 22250	CONDEELIS, JOHN S INTERACTIONS OF ACTIN CYTOSKELETON WITH PLASMA MEMBRANE	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	11-82	4	CBY		69,232	121,255
5	R01 GM25816-03 11910	RAUCHER, STANLEY INDOLE ALKALOID SYNTHESIS VIA CLAISEN REARRANGEMENT	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	03-83	0	MCHA		39,809	53,304
2	R01 GM25819-04 11770	BRUNTON, LAURENCE L DRUG MODULATED EXTRUSION OF CELLULAR CYCLIC AMP	UNIVERSITY OF CALIFORNIA SAN DIEGO LA JOLLA		CALIFORNIA	82	11-82	2	BIO		54,823	70,241
2	R01 GM25821-04 21750	RINGOLD, GORDON M MOLECULAR BIOLOGY OF STEROID HORMONE ACTION	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	11-82	4	MBY		121,223	178,946
5	R01 GM25826-04 12930	QUATE, CALVIN F ACOUSTIC MICROSCOPY FOR BIOMEDICAL APPLICATIONS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	11-82	0	555		100,574	158,907
2	R01 GM25829-04A1 21750	FINKELSTEIN, DAVID B COORDINATION OF PERIODIC GENE EXPRESSION IN YEAST	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	08-83	2	MBY		59,850	79,986
2	R01 GM25832-04 22200	SOLL, DAVID R THE REGULATION OF TIMING IN DEVELOPING SYSTEMS	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	08-83	3	CTY		71,126	96,026
2	R01 GM25845-04 AM 11920	MILLER, MARVIN J SYNTHESIS OF FERRICHROMES AND RELATED IRON CHELATORS	UNIVERSITY OF NOTRE DAME	NOTRE DAME	INDIANA	82	08-83	2	BMT		51,295	71,899
2	R01 GM25846-03 21750	LUSTY, CAROL J GENE STRUCTURE OF CARBAMYL PHOSPHATE SYNTHETASE	PUBLIC HLTH RES INST OF THE CITY OF NY	NEW YORK	NEW YORK	82	03-83	2	MBY		84,850	112,641
5	R01 GM25854-03 21750	TORRIANI-GORINI, ANNAMARIA GENETICS OF ALKALINE PHOSPHATASE EXPRESSION IN E. COLI	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	81	11-82	0	MBC		41,888	64,602
2	R01 GM25855-04 21320	PARKER, JACK M HIGH LEVEL MISTRANSLATION - PROKARYOTIC/EUKARYOTIC CELLS	SOUTHERN ILLINOIS UNIVERSITY CARBONDALE	CARBONDALE	ILLINOIS	82	05-83	3	MG		74,381	98,006

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2	R01 GM25862-04 22300	FREED, JACK H ELECTRON-SPIN RELAXATION IN MODEL MEMBRANES	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	11-82	3	BBCB	94,600	138,293
5	R01 GM25864-03 21600	FOWLER, ELIZABETH F SEGREGATION OF CHROMOSOMAL PROTEINS	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	81	11-82	0	MBY	59,134	84,273
2	R01 GM25871-04 21600	HOLMES, WALTER M GENE ORGANIZATION AND EXPRESSION OF TRNA	VIRGINIA COMMONWEALTH UNIVERSITY	RICHMOND	VIRGINIA	82	11-82	4	MG	64,747	94,089
2	R01 GM25874-04 21320	LINDQUIST, SUSAN L REGULATION OF GENE EXPRESSION IN DROSOPHILA	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	11-82	4	GEN	86,897	126,533
5	R01 GM25877-04 22500	SUDMEIER, JAMES L STUDIES OF ZINC AND CALCIUM METALLOPROTEINS	UNIVERSITY OF CALIFORNIA RIVERSIDE	RIVERSIDE	CALIFORNIA	82	03-83	1	BMT	47,840	61,224
5	R01 GM25879-03 22450	XAVIER, ANTONIO V STRUCTURE AND FUNCTION OF PROTEINS IN SULFATE REDUCTION	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	81	09-82	0	BMT	43,060	59,905
5	R01 GM25886-03 21600	MARX, KENNETH A PROPERTIES OF NUCLEASE-RESISTING MOUSE CHROMATIN	DARTMOUTH COLLEGE	HANOVER	NEW HAMPSHIRE	81	07-83	0	GEN	41,541	62,021
2	R01 GM25888-04A1 AM 11790	O'BRIEN, THOMAS W CHLORAMPHENICOL-INDUCED APLASTIC ANEMIA	UNIVERSITY OF FLORIDA	GAINESVILLE	FLORIDA	82	07-83	2	EH	58,236	85,607
5	R01 GM25889-03 21100	GILL, STANLEY J THERMODYNAMIC STUDY OF PROTEIN-NUCLEIC ACID INTERACTIONS	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	81	11-82	0	BBCA	41,054	57,476
2	R01 GM25896-04 13410	MILLER, CAROL L ANALYSIS OF IMMUNE STATUS OF TRAUMA AND SURGICAL PATIENT	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	12-82	2	SAT	71,179	92,702
5	R01 GM25901-03 22450	COTTRELL, STEPHEN F MITOCHONDRIAL ASSEMBLY DURING THE YEAST CELL CYCLE	BROOKLYN COLLEGE	NEW YORK	NEW YORK	81	08-83	0	MBY	28,524	45,610
2	R01 GM25902-04 21700	WEISSMAN, IRVING L HISTOCOMPATIBILITY AND ALLORECOGNITION IN TUNICATES	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	07-83	2	MGN	76,152	118,696

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5	R01 GM25908-02 11940	MAHATT, STANLEY L USE OF NMR IN SOLID-PHASE PEPTIDE SYNTHESES	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	02-83	1	MCHA		88,117	88,117
2	R01 GM25909-04 21310	MEARES, CLAUDE F PHOTOCHEMICAL & SPECTROSCOPIC PROBES OF RNA POLYMERASE	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	11-82	4	BMT		57,566	71,563
2	R01 GM25912-04 11920	REBEK, JULIUS, JR STUDIES IN CATALYSIS AND MECHANISM	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	11-82	2	BNP		64,082	92,205
5	R01 GM25921-03 21250	SIEGEL, ELI C GENETIC CONTROL OF MUTATION IN ESCHERICHIA COLI	TUFTS UNIVERSITY	MEDFORD	MASSACHUSETTS	81	12-82	0	MBC		45,445	69,424
2	R01 GM25923-04 11760	GROVES, JOHN T MOLECULAR PROBES OF THE MECHANISM OF CYTOCHROME P-450	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	11-82	3	PB		77,579	122,575
5	R01 GM25926-04 13200	MULDOON, SHEILA M GENERAL ANESTHETICS AND VASCULAR NEUROEFFECTOR SYSTEMS	U.S. UNIFORMED SERVICES UNIV OF HLTH SCI	BETHESDA	MARYLAND	82	02-83	0	SAT		29,126	29,126
2	R01 GM25937-04 22300	DUNKER, A KEITH LASER RAMAN STUDIES OF LIPID/PROTEIN INTERACTIONS	WASHINGTON STATE UNIVERSITY	PULLMAN	WASHINGTON	82	03-83	3	BBCB		46,526	65,213
2	R01 GM25938-04A1 22300	LEVITT, DAVID G BEHAVIOR AND EXISTENCE OF CELL MEMBRANE PORES	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	06-83	2	PHY		53,843	71,743
2	R01 GM25946-04 13410	KAPLAN, JOHN E PHAGOCYTIC CONTROL OF THROMBOSIS DURING SEPSIS	ALBANY MEDICAL COLLEGE	ALBANY	NEW YORK	82	11-82	2	HEM		50,938	79,474
5	R01 GM25948-03 21200	BREMER, HANS CONTROL OF DNA REPLICATION IN BACTERIA	UNIVERSITY OF TEXAS DALLAS	RICHARDSON	TEXAS	81	08-83	0	MBC		47,654	63,856
2	R01 GM25950-04 11910	DANHEISER, RICK L SYNTHETIC APPROACHES TO CYCLIC NATURAL PRODUCTS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	11-82	2	MCHA		81,825	106,533
2	R01 GM25953-04 ES 11760	TU, SHIAO-CHUN STRUCTURE AND MECHANISM OF FLAVOPROTEIN HYDROXYLASES	UNIVERSITY OF HOUSTON AT HOUSTON	HOUSTON	TEXAS	82	03-83	2	PB		78,448	89,436

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2	R01 GM25966-04 21700	MITCHELL, HERSCHEL K BIOCHEMICAL GENETICS OF DEVELOPMENT IN DROSOPHILA	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	03-83	2	GEN		69,284	102,300
5	R01 GM25973-03 22300	GREENBERG, G ROBERT MEMBRANE PROTEINS IN DEOXYRIBONUCLEOTIDE SYNTHESIS	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	81	11-82	0	PC		56,084	87,743
2	R01 GM25975-04 22500	GERIG, JOHN T STRUCTURAL STUDIES OF PROTEINS BY FLUORINE NMR	UNIVERSITY OF CALIFORNIA SANTA BARBARA	SANTA BARBARA	CALIFORNIA	82	08-83	2	BBCB		76,513	98,425
2	R01 GM25976-04 21700	SCHEDL, PAUL GENE EXPRESSION DURING D MELANOGASTER EMBRYOGENESIS	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	11-82	4	GEN		72,576	115,428
5	R01 GM25981-04 11920	BRESLOW, RONALD C MODEL AND MECHANISM STUDIES ON ZINC ENZYMES	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	11-82	0	BMT		76,410	128,063
2	R01 GM25996-04 11910	GOULD, STEVEN J BIOSYNTHETIC STUDIES USING 15N-13C CHMR SPECTROSCOPY	UNIVERSITY OF CONNECTICUT STORRS	STORRS	CONNECTICUT	82	11-82	2	BNP		62,317	94,395
5	R01 GM25998-03 13700	PROUDFIT, HERBERT K CNS SITES OF ACTION OF ANALGESIC DRUGS	UNIVERSITY OF ILLINOIS MEDICAL CENTER	CHICAGO	ILLINOIS	82	12-82	0	SAT		26,509	41,619
5	R01 GM26004-04 22450	LAUFER, DANIEL A CYCLOAMYLOSE COMPLEXES	UNIVERSITY OF MASSACHUSETTS BOSTON	BOSTON	MASSACHUSETTS	82	05-83	1	BBCA		33,079	58,006
5	R01 GM26012-02 13700	HALPERIN, MAX EARLY STOPPING IN LONG-TERM CLINICAL TRIALS	GEORGE WASHINGTON UNIVERSITY	WASHINGTON	DIST OF COL	81	11-82	0	SSS		37,937	56,147
2	R01 GM26016-04A1 13410	MANNICK, JOHN A IMMUNOLOGIC STUDIES OF PATIENTS AFTER TRAUMATIC INJURY	PETER BENT BRIGHAM HOSPITAL	BOSTON	MASSACHUSETTS	82	01-83	4	SSS		140,664	168,234
2	R01 GM26017-04 AI 21200	KOLODNER, RICHARD D ENZYMATIC MECHANISMS OF GENETIC RECOMBINATION	SIDNEY FARBER CANCER INSTITUTE	BOSTON	MASSACHUSETTS	82	11-82	4	MG		105,401	161,841
2	R01 GM26020-04 22300	CLARKE, STEVEN G CONTROL OF EUCARYOTIC MEMBRANE FUNCTION BY METHYLATION	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	11-82	4	PC		72,270	91,234

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5	R01 GM26024-03 11860	CHO, ARTHUR K NITROGEN OXIDATION IN DRUG METABOLISM	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	81	01-83	0	PHRA		60,561	79,335
2	R01 GM26028-04 AM 21600	VILLA-KOMAROFF, LYDIA THE STRUCTURE OF GENES ENCODING INSULIN-LIKE PEPTIDES	UNIVERSITY OF MASSACHUSETTS MEDICAL SCH	WORCESTER	MASSACHUSETTS	82	11-82	2	MGN		69,560	113,982
5	R01 GM26038-03 21320	RICHARDSON, JOHN P ENZYMES OF NUCLEAR RNA METABOLISM	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	81	04-83	0	BIO		31,271	43,477
2	R01 GM26050-03 22500	MACCOLL, ROBERT J STRUCTURE AND FUNCTION OF PHOTOSYNTHETIC PIGMENTS	NEW YORK STATE DEPARTMENT OF HEALTH	ALBANY	NEW YORK	82	03-83	2	BBCA		29,640	44,636
5	R01 GM26071-04 22500	KOPPLE, KENNETH D INFLUENCE OF SOLVATION ON PEPTIDE CONFORMATION	ILLINOIS INSTITUTE OF TECHNOLOGY	CHICAGO	ILLINOIS	82	04-83	1	BBCB		98,940	156,625
5	R01 GM26074-03 11920	SCHWAB, JOHN M STEREOCHEMISTRY AND MECHANISMS OF ENZYME REACTIONS	CATHOLIC UNIVERSITY OF AMERICA	WASHINGTON	DIST OF COL	81	11-82	0	MCHA		32,784	50,487
5	R01 GM26078-03 22500	MUKERJEE, PASUPATI MICROENVIRONMENTAL STUDIES ON PHOSPHOLIPID SYSTEMS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	81	12-82	0	BBCA		22,653	32,394
2	R01 GM26079-04 21750	YOUNG, ELTON T, II GENETIC REGULATION OF ALCOHOL METABOLISM IN YEAST	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	11-82	4	GEN		115,776	152,990
5	R01 GM26086-04 21600	VARSHAVSKY, ALEXANDER J STRUCTURE OF CELLULAR AND VIRAL CHROMATIN STUDIES	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	11-82	1	CBY		55,077	77,969
2	R01 GM26091-04 22250	BRYAN, JOSEPH CHEMISTRY AND LOCALIZATION OF ACTIN GELLING PROTEINS	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	11-82	4	CBY		94,562	128,604
2	R01 GM26096-05 12840	MACFARLANE, RONALD D BIOMEDICAL USE OF PLASMA DESORPTION MASS SPECTROMETRY	TEXAS AGRI AND MECH UNIV COLLEGE STATION	COLLEGE STATION	TEXAS	82	06-83	2	BMT		122,245	145,748
2	R01 GM26098-04 22450	LOACH, PAUL A MODEL SYSTEMS FOR ENERGY COUPLING IN MEMBRANES	NORTHWESTERN UNIVERSITY	EVANSTON	ILLINOIS	82	06-83	4	PB		59,459	79,583

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2	R01 GM26100-04 21750	WHITELEY, HELEN R PHAGE-INFECTED B. SUBTILIS: PROMOTER STUDIES	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	11-82	3	MBC	38,723	51,206
2	R01 GM26102-04A1 13410	LOEGERING, DANIEL J HEMOLYSIS AND PHAGOCYTIC DYSFUNCTION DURING SHOCK	ALBANY MEDICAL COLLEGE	ALBANY	NEW YORK	82	06-83	2	SAT	57,888	89,261
2	R01 GM26103-05 HD 21480	FRANCKE, UTA INTRACHROMOSOMAL GENE MAPPING	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	06-83	4	MGN	104,500	171,480
5	R01 GM26107-12 21200	OLIVERA, BALDOMERO M DISCONTINUOUS DNA SYNTHESIS IN VITRO	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	04-83	1	PC	69,815	100,107
2	R01 GM26108-04 21200	HAMLIN, JOYCE L CONTROL OF EUKARYOTIC DNA SYNTHESIS	UNIVERSITY OF VIRGINIA	CHARLOTTESVILLE CHARLOTTESVILLE	VIRGINIA	82	11-82	2	SSS	83,594	120,311
2	R01 GM26111-07 11910	EVANS, DAVID A ANTICANCER AND NEUROTOXIC ALKALOID SYNTHESIS	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	03-83	3	MCHA	93,568	138,481
5	R01 GM26114-05 11760	SCHENKMAN, JOHN B INDUCTION AND MODE OF ACTION OF HEPATIC DRUG OXIDASE	UNIVERSITY OF CONNECTICUT HEALTH CENTER	FARMINGTON	CONNECTICUT	82	05-83	0	ET	121,207	175,300
5	R01 GM26121-04 22250	BAJER, ANDREW S MITOSIS EXPERIMENTAL STUDIES	UNIVERSITY OF OREGON	EUGENE	OREGON	82	03-83	1	CBY	70,757	93,015
5	R01 GM26132-05 22250	POLLARD, THOMAS D ACTOMYOSIN-MICROTUBULE INTERACTIONS IN CELL DIVISION	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	06-83	0	CBY	86,262	128,816
2	R01 GM26133-04 22450	WARDEN, JOSEPH T ESR STUDIES OF ELECTRON TRANSPORT IN PHOTOSYSTEM 2	RENSSELAER POLYTECHNIC INSTITUTE	TROY	NEW YORK	82	08-83	2	BBCA	78,433	107,684
5	R01 GM26134-09 22400	SUHADOLNIK, ROBERT J CELLULAR ROLE OF NAD, NAD ANALOGS, QTRNA & BIOSYNTHESIS	TEMPLE UNIVERSITY	PHILADELPHIA	PENNSYLVANIA	82	05-83	1	PC	70,760	107,468
5	R01 GM26136-05 13200	HUANG, JEN-TZAW ULTRALONG NERVE BLOCK AND UNCONVENTIONAL ANESTHETICS	VIRGINIA MASON RESEARCH CENTER	SEATTLE	WASHINGTON	82	08-83	0	SAT	36,469	54,941

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5	R01 GM26137-03 21750	GURNEY, THEODORE, JR DRY FRACTIONATION OF MAMMALIAN CELLS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	81	11-82	0	MBY		43,832	64,433
5	R01 GM26139-03 21700	GRAINGER, ROBERT M THE ROLE OF OOCYTE PROTEINS AND RNAS IN DEVELOPMENT	UNIVERSITY OF VIRGINIA	CHARLOTTESVILLE	VIRGINIA	81	08-83	0	GEN		50,107	71,080
5 M	P50 GM26145-04 13300	SHIRES, G THOMAS BURN AND TRAUMA RESEARCH CENTER	CORNELL UNIVERSITY MEDICAL CENTER	NEW YORK	NEW YORK	82	03-83	1	SRC		249,070	363,807
5	R01 GM26147-04 21750	CHRISTENSEN, JAMES R MECHANISM BY WHICH N GENE OF LAMBDA EXCLUDES PHAGE T1	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	07-83	0	EVR		31,779	52,435
2	R01 GM26150-04 22200	GOODENOUGH, URSULA W FLAGELLAR MEMBRANE ADHESION AND SEXUAL SIGNALING	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	03-83	4	CP		115,581	160,610
5	R01 GM26153-04 21400	ALLEN, DONALD O BIOCHEMISTRY OF INHERITED VARIATIONS IN DRUG RESPONSE	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA	COLUMBIA	SOUTH CAROLINA	81	06-83	0	MET		41,879	56,800
5	R01 GM26154-12 21750	STEITZ, JOAN A MOLECULAR MECHANISMS IN GENE EXPRESSION	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	04-83	1	MBC		110,295	174,266
5	R01 GM26155-05 22250	MURPHY, DOUGLAS B THE MOLECULAR MECHANISM OF INTRACELLULAR MOTILITY	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	07-83	2	MBY		61,429	92,144
5	R01 GM26156-03 22400	CRONAN, JOHN E, JR PROTEIN LIPID INTERACTION	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	12-82	0	MBC		25,908	35,960
5	R01 GM26165-03 22200	JULIANO, RUDOLPH L THE MOLECULAR BASES OF CELL ADHESION	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	08-83	0	CP		44,893	61,952
2	R01 GM26166-04 11920	PARRY, RONALD J METABOLISM OF CHIRALLY LABELED ADENOSINE	RICE UNIVERSITY	HOUSTON	TEXAS	82	11-82	2	BNP		41,082	55,431
5	R01 GM26167-03 21320	LANKS, KARL W PROTEIN SYNTHESIS CONTROL IN NON-PROLIFERATING CELLS	DOWNSTATE MEDICAL CENTER	NEW YORK	NEW YORK	82	12-82	0	CTY		53,070	84,010

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5	R01 GM26176-04 21600	WEINTRAUB, HAROLD M THE COMPLEXITY OF CHROMOSOME STRUCTURE AND ASSEMBLY	FRED HUTCHINSON CANCER RESEARCH CENTER	SEATTLE	WASHINGTON	82	04-83	1	MBY		52,368	57,092
2	R01 GM26178-04 11940	HEGEDUS, LOUIS S ORGANIMETALLIC SYNTHESES OF BIOACTIVE COMPOUNDS	COLORADO STATE UNIVERSITY	FORT COLLINS	COLORADO	82	03-83	2	BMT		57,472	76,324
5	R01 GM26183-03 21200	MOLINEUX, IAN J STUDIES OF DNA-BINDING PROTEINS AND T7 DNA SYNTHESIS	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	81	03-83	0	MBC		52,361	68,980
5	R01 GM26187-03 12400	MARTIN, ROY W AIR EMBOLI DETECTION BY ULTRASONIC CATHETER METHODS	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	81	09-82	0	SGYB		51,810	69,085
5	R01 GM26193-03 22410	BE MILLER, JAMES N POTENTIAL GLYCOSYLTRANSFERASE INHIBITORS	SOUTHERN ILLINOIS UNIVERSITY CARBONDALE	CARBONDALE	ILLINOIS	81	05-83	0	PBC		45,926	68,261
2	R01 GM26199-04 22300	CANTLEY, LEWIS C STRUCTURE AND MECHANISM OF MEMBRANE TRANSPORT SYSTEMS	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	03-83	4	PB		49,027	72,694
5	R01 GM26200-04 21700	BAKER, BRUCE S GENETIC CONTROL OF RECOMBINATION IN DROSOPHILA	UNIVERSITY OF CALIFORNIA SAN DIEGO LA JOLLA		CALIFORNIA	82	03-83	1	GEN		26,793	34,866
5	R01 GM26203-03 22550	CARTER, CHARLES W, JR TRP-TRNA LIGASE AND SUBSTRATE COMPLEXES: X-RAY STUDY	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	81	03-83	0	BBCB		37,983	54,696
5	R01 GM26207-03 21700	MARONI, GUSTAVO P REGULATION OF ALCOHOL DEHYDROGENASE IN DROSOPHILA	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	81	03-83	0	GEN		30,555	43,999
2	R01 GM26217-04 21320	CULBERTSON, MICHAEL R FRAMESHIFT SUPPRESSORS AND TRANSFER RNA IN YEAST	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	03-83	4	GEN		72,232	99,574
5	R01 GM26221-03 11760	TEPHLY, THOMAS R MORPHINE AND ESTROGEN GLUCURONYLTRANSFERASE ACTIVITIES	UNIVERSITY OF IOWA	IOWA CITY	IOWA	81	03-83	0	PHRA		44,748	61,752
5	R01 GM26222-03 11880	SHAPIRO, BERNARD H DEVELOPMENTAL ORGANIZERS OF DRUG METABOLISM	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	81	03-83	0	PHRA		57,190	94,364

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2	R01 GM26226-04 11920	BALCH, ALAN L IRON PORPHYRIN ACTIVATION OF DIOXYGEN/SMALL MOLECULES	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	03-83	4	BMT		76,874	95,745
5	R01 GM26227-03 11750	YATVIN, MILTON B ENGINEERING OF LIPOSOMES TO RELEASE DRUG BY HYPERTHERMIA	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	07-83	0	PHRA		41,069	58,729
5	R01 GM26228-03 22200	WEIGEL, PAUL H CELL RECOGNITION AND RESPONSES TO EXTERNAL CARBOHYDRATES	UNIVERSITY OF TEXAS MED BR GALVESTON	GALVESTON	TEXAS	82	11-82	0	CBY		45,301	60,631
5	R01 GM26234-03 22300	TILLACK, THOMAS W GLYCOLIPID LOCALIZATION IN LIPOSOMES AND MEMBRANES	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	11-82	0	CTY		43,500	63,075
5	R01 GM26235-03 13410	WINCHURCH, RICHARD A TRAUMA-INDUCED SUPPRESSION OF IMMUNITY	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	81	07-85	0	IMS		43,529	65,294
2	R01 GM26237-04 22400	KANTROWITZ, EVAN R THE MOLECULAR BASIS OF CELLULAR CONTROL MECHANISMS	BOSTON COLLEGE	CHESTNUT HILL	MASSACHUSETTS	82	03-83	3	BIO		94,792	125,244
2	R01 GM26242-04 22500	WOODWARD, CLARE K SINGLE PROTON EXCHANGE KINETICS IN PROTEINS	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	03-83	2	BBCA		48,220	65,579
5	R01 GM26245-03 11940	EPSTEIN, WILLIAM W PHOTOCHEMICAL TECHNIQUES ON BIOLOGICAL PROBLEMS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	81	11-82	0	MCHA		46,914	67,755
5	R01 GM26248-04 22300	NIEDERMAN, ROBERT A ASSEMBLY OF AN ENERGY TRANSDUCING MEMBRANE SYSTEM	RUTGERS THE STATE UNIV NEW BRUNSWICK	NEW BRUNSWICK	NEW JERSEY	82	03-83	1	MBC		58,500	92,430
5	R01 GM26249-04 21100	USHER, DAVID A TEMPLATE REACTIONS AND CHEMICAL EVOLUTION	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	03-83	0	MCHA		32,104	53,639
5	R01 GM26259-05 21600	BLACKBURN, ELIZABETH H SPECIFIC DNA-PROTEIN INTERACTIONS IN TETRAHYMENA	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	06-83	1	GEN		72,292	102,582
5	R01 GM26265-03 11940	HARDING, KENN E SPIROCYCLIC SYSTEM SYNTHESIS--PI CATIONIC CYCLIZATION	TEXAS AGRI AND MECH UNIV COLLEGE STATION	COLLEGE STATION	TEXAS	81	09-82	0	MCHA		38,364	51,024

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5	R01 GM26268-03 11940	BERGBREITER, DAVID E ELECTROPHILIC ASYMMETRIC SYNTHESIS	TEXAS AGRI AND MECH UNIV	COLLEGE STATION COLLEGE STATION	TEXAS	81	09-82	0	MCHA		45,701	60,386
5	R01 GM26283-03 11890	KISSINGER, PETER T N-ACETYL-P-QUINONEIMINE IN ACETAMINOPHEN TOXICITY	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	81	09-82	0	TOX		47,613	73,167
5	R01 GM26287-03 22300	MOFFETT, DAVID F POTASSIUM TRANSPORT BY INSECT MIDGUT	WASHINGTON STATE UNIVERSITY	PULLMAN	WASHINGTON	81	09-82	0	PHY		29,637	42,974
2	R01 GM26290-04 22400	PEGG, ANTHONY E INVESTIGATIONS OF MAMMALIAN AMINOPROPYLTRANSFERASES	PENNSYLVANIA STATE UNIV HERSHEY MED CTR	HERSHEY	PENNSYLVANIA	82	03-83	4	BIO		64,228	86,893
5	R01 GM26293-03 22400	BAUERLE, RONALD H GENETIC ANALYSIS OF THE ASSEMBLY OF AN ENZYME COMPLEX	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	03-83	0	MBC		54,787	79,441
5	R01 GM26294-03 11940	SCHORE, NEIL E SYNTHESIS OF BIOLOGICALLY ACTIVE CYCLOPENTENONES	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	81	03-83	0	BMT		36,494	47,807
5	R01 GM26295-03 11920	ELLIS, PAUL D 113CD AND 77SE NMR OF SYSTEMS OF BIOLOGICAL INTEREST	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA	COLUMBIA	SOUTH CAROLINA	81	11-82	0	BMT		46,380	61,780
5	R01 GM26297-06 13410	LOEGERING, DANIEL J MECHANISM OF RETICULOENDOTHELIAL FAILURE IN SHOCK	ALBANY MEDICAL COLLEGE	ALBANY	NEW YORK	81	09-82	0	SGYA		30,354	44,924
5	R01 GM26305-04 22450	CROFTS, ANTONY R THE PROTON PUMPS OF PHOTOSYNTHETIC BACTERIA	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	03-83	0	BBCA		75,709	106,962
5	R01 GM26324-03 11840	ISIED, STEPHAN S INERT METAL ION PROTECTING GROUPS IN PEPTIDE SYNTHESIS	RUTGERS THE STATE UNIV NEW BRUNSWICK	NEW BRUNSWICK	NEW JERSEY	81	09-82	0	BMT		38,829	59,020
5	R01 GM26333-03 21200	BERG, DOUGLAS E INITIATION OF DNA REPLICATION IN VITRO	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	81	03-83	0	PC		56,879	87,612
2	R01 GM26334-04 22450	WIMMER, MARY J MECHANISMS OF ENERGY-COUPLED ATP SYNTHESIS/HYDROLYSIS	WEST VIRGINIA UNIVERSITY	MORGANTOWN	WEST VIRGINIA	82	07-83	2	PB		53,761	72,831

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2	R01 GM26338-05 22250	POLLARD, THOMAS D MOLECULAR MECHANISM OF CELLULAR MOTILITY	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	08-83	4	MBY	110,405	150,618
5	R01 GM26340-03 11870	MAGUIRE, MICHAEL E ROLE OF MAGNESIUM IN CELL RESPONSE TO HORMONE	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	82	03-83	0	PHRA	66,000	99,660
2	R01 GM26346-04 22550	WHITE, STEPHEN H STRUCTURAL STUDIES OF BILAYER SOLUTIONS	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	03-83	2	BBCB	207,920	237,694
5	R01 GM26349-03 22300	KLEIN, CLAUDETTE PROCESSING OF THE CHEMOTACTIC SIGNAL IN D DISCOIDEUM	ST. LOUIS UNIVERSITY	SAINT LOUIS	MISSOURI	81	12-82	0	MBY	42,952	62,710
5	R01 GM26351-04 22300	OZOLS, JURIS B STRUCTURE AND PROTEOLYSIS OF HEPATIC MEMBRANE PROTEINS	UNIVERSITY OF CONNECTICUT HEALTH CENTER	FARMINGTON	CONNECTICUT	82	06-83	1	BIO	85,703	124,269
5	R01 GM26355-04 21200	COHEN, STANLEY N REPLICATION AND TRANSFER OF BACTERIAL PLASMIDS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	1	MBC	98,734	156,000
2	R01 GM26357-04 22550	DEROSIER, DAVID J STRUCTURAL STUDIES OF CELLULAR ASSEMBLIES OF ACTIN	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	03-83	2	BBCB	34,320	54,358
2	R01 GM26360-04 22550	TULINSKY, ALEXANDER CRYSTAL-SOLUTION STUDY OF CATALYTICALLY ACTIVE ALDOLASE	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	04-83	2	BBCB	109,000	144,998
5	R01 GM26362-03 21600	CASE, STEVEN T THE ORGANIZATION AND EXPRESSION OF CHROMOMERES	UNIVERSITY OF MISSISSIPPI MEDICAL CENTER	JACKSON	MISSISSIPPI	81	12-82	0	MBY	49,755	66,213
5	R01 GM26366-03 11890	WILEY, ROBERT A FURAN LUNG TOXINS: ORGAN SPECIFICITY AND METABOLISM	UNIVERSITY OF KANSAS LAWRENCE	LAWRENCE	KANSAS	81	11-82	0	TOX	37,509	52,380
5	R01 GM26369-05 22300	PAPAHADJOPOULOS, DEMETRIOS PHOSPHOLIPID-PROTEIN INTERACTIONS AND MEMBRANE FUNCTION	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	08-83	1	BBCB	64,019	81,752
2	R01 GM26378-04 21600	RAE, PETER M GENE INTERRUPTIONS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83	4	GEN	100,790	156,116

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5	R01 GM26387-03 22400	MALEY, FRANK FOLATE BINDING SITES IN THYMIDYLATE SYNTHETASE	NEW YORK STATE DEPARTMENT OF HEALTH	ALBANY	NEW YORK	81	12-82	0	BIO		16,500	16,500
2	R01 GM26388-04 11920	BERCHTOLD, GLENN A ARENE OXIDES: IMPORTANCE IN BIOLOGICAL REACTIONS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	06-83	2	BNP		76,799	107,890
5	R01 GM26390-03 11920	CLARKE, MICHAEL J STABLE HEAVY-METAL COMPLEXES OF NUCLEOTIDE AND COENZYME	BOSTON COLLEGE	CHESTNUT HILL	MASSACHUSETTS	81	07-83	0	BMT		27,460	39,943
2	R01 GM26392-04 22250	DEWEY, MAYNARD M LIMULUS THICK FILAMENT STRUCTURE	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	06-83	2	CBY		73,501	108,939
5	R01 GM26395-03 12320	PERRY, JACQUELIN THE DYNAMICS OF EMG-FORCE-MOVEMENT RELATIONSHIPS	RANCHO LOS AMIGOS HOSPITAL	DOWNEY	CALIFORNIA	81	09-82	0	AFY		83,101	99,504
5	R01 GM26396-04 13420	ELWYN, DAVID H COMPOSITION OF WEIGHT GAIN IN SURGICAL PATIENTS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	07-83	0	NTN		62,163	105,491
5	R01 GM26399-03 21200	BOTT, KENNETH F CHARACTERIZATION OF THE B SUBTILIS CHROMOSOME ORIGIN	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	81	07-83	0	MBC		36,914	50,740
5	R01 GM26403-03 13200	MILLER, RONALD D PARALYSIS--ITS ANTAGONISM DURING SURGERY & ANESTHESIA	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	81	11-82	0	PHRA		32,935	43,145
5	R01 GM26407-03 13200	FINCK, A DONALD ROLE OF ENDORPHINS IN ANESTHETIC-INDUCED ANALGESIA	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	03-83	0	NEUA		52,950	88,744
2	R01 GM26414-04 11780	WILSON, CAROL M THE GENETIC CONTROL OF RENIN ACTIVITY	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	03-83	2	MGN		75,374	101,404
5	R01 GM26415-03 21600	WRAY, GRANVILLE W PRECONDENSED CHROMOSOMES--STRUCTURE AND BIOCHEMISTRY	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	81	06-83	0	GEN		45,433	61,069
5	R01 GM26420-02 22450	JOSHI, SAROJ ATPASE COMPLEX: PURIFICATION AND TOPOLOGY	BOSTON BIOMEDICAL RESEARCH INSTITUTE	BOSTON	MASSACHUSETTS	82	03-83	1	PB		56,618	81,112

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2	R01 GM26422-04 21200	PORTER, RONALD D EFFECTS OF DNA SUBSTRATES ON RECOMBINATION IN E. COLI	PENNSYLVANIA STATE UNIVERSITY UNIV PARK	UNIVERSITY PARK	PENNSYLVANIA	82	03-83	2	MG	59,330	76,391
5	R01 GM26428-18 11930	DENNEY, DONALD B PREPARATION AND CHEMISTRY OF ORGANOPHOSPHORUS COMPOUNDS	RUTGERS THE STATE UNIV NEW BRUNSWICK	NEW BRUNSWICK	NEW JERSEY	82	04-83	0	MCHA	52,055	82,247
2	R01 GM26429-17 22200	HELMSTETTER, CHARLES E BIOCHEMISTRY AND RADIATION EFFECT DURING THE CELL CYCLE	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	06-83	2	MBC	55,320	78,681
5	R01 GM26430-18 22400	TOUSTER, OSCAR BIOCHEMICAL STUDIES ON LYSOSOMES AND RELATED ENZYMES	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	06-83	2	CBY	73,655	115,840
2	R01 GM26433-04 13420	GUMP, FRANK E REGIONAL METABOLISM IN SEPSIS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	03-83	2	SAT	94,498	157,121
2	R01 GM26437-04 21310	BENNETT, GEORGE N STRUCTURE-FUNCTION STUDY OF BACTERIAL PROMOTERS	RICE UNIVERSITY	HOUSTON	TEXAS	82	03-83	2	MG	74,715	100,806
5	R01 GM26440-03 21600	ADOLPH, KENNETH W NONHISTONE PROTEINS AND HELA CHROMOSOME STRUCTURE	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	81	01-83	0	MBY	41,399	55,907
2	R01 GM26444-04 21750	EVANS, RONALD M HORMONAL REGULATION OF GENE EXPRESSION IN MAMMALIAN CELL	SALK INSTITUTE FOR BIOLOGICAL STUDIES	LA JOLLA	CALIFORNIA	82	03-83	2	MBY	89,732	145,366
2	R01 GM26449-04 CA 21480	FOURNIER, RAYMOND E GENETIC ANALYSIS OF CELL-TYPE-SPECIFIC FUNCTIONS	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	03-83	2	MGN	93,769	133,609
2	R01 GM26453-04 21600	GOTTESFELD, JOEL M ISOLATION OF 5S GENE CHROMATIN	SCRIPPS CLINIC AND RESEARCH FOUNDATION	LA JOLLA	CALIFORNIA	82	07-83	2	GEN	102,760	159,205
5	R01 GM26461-04 13700	YANG, JOSEPH C ANALGESICS IN EXPERIMENTAL AND CLINICAL PAIN	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	06-83	0	NEUA	35,936	60,983
2	R01 GM26462-04 22600	ALLEN, LELAND C ELECTRONIC STRUCTURE OF ENZYMES AND REDOX PROTEINS	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	03-83	2	SSS	48,580	79,671

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2	R01 GM26463-04 21400	BERGER, NATHAN A POLY(ADPR) IN GENETIC DISORDERS OF DNA REPAIR	JEWISH HOSPITAL OF ST. LOUIS	SAINT LOUIS	MISSOURI	82	03-83	4	MGN		147,388	190,402
5	R01 GM26472-03 11920	KAREL, MARCUS FREE RADICAL REACTIONS OF LIPOPEROXIDES AND PROTEINS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	11-82	0	BBCB		41,838	67,296
5	R01 GM26480-03 11880	RIKANS, LORA E VITAMIN C DEFICIENCY AND MICROSOMAL ENZYMES	UNIVERSITY OF OKLAHOMA HLTH SCIENCES CTR	OKLAHOMA CITY	OKLAHOMA	82	03-83	0	NTN		28,963	40,548
5	R01 GM26484-03 22200	RUSTAD, RONALD C CELL CYCLE DEPENDENT CHANGES IN RADIATION SENSITIVITY	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	81	03-83	0	RAD		46,609	73,294
2	R01 GM26486-04 11930	KOLHOUSE, JOHN F THE METABOLIC ROLE OF COBALAMIN AND FOLATE IN MAMMALS	UNIVERSITY OF COLORADO HLTH SCIENCES CTR	DENVER	COLORADO	82	06-83	4	BMT		71,435	86,745
2	R01 GM26488-04 22400	GUYNN, ROBERT W KINETICS AND THERMODYNAMICS OF SERINE BIOSYNTHESIS	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	03-83	2	BIO		61,068	81,424
2	R01 GM26494-04 21320	JOHNSON, ARTHUR E THE INTERACTION OF AA-TRNA WITH EF-TU AND RIBOSOMES	UNIVERSITY OF OKLAHOMA NORMAN	NORMAN	OKLAHOMA	82	03-83	2	BBCA		76,555	99,427
5	R01 GM26508-03 12400	JANATA, JIRI IMMUNOCHEMICALLY SENSITIVE FIELD EFFECT TRANSISTOR	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	81	03-83	0	SGYB		39,653	58,290
2	R01 GM26515-04 21750	HIRSH, DAVID I STRUCTURE AND EXPRESSION OF EUCARYOTIC GENES	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	03-83	4	GEN		103,390	138,798
5	R01 GM26517-03 21320	SARKAR, NILIMA FUNCTION OF POLYADENYLATE SEQUENCES IN BACTERIAL RNA	BOSTON BIOMEDICAL RESEARCH INSTITUTE	BOSTON	MASSACHUSETTS	81	12-82	0	MBC		42,551	62,818
5	R01 GM26520-03 21280	WOLSTENHOLME, DAVID R VARIANTS OF RAT MITOCHONDRIAL DNA	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	81	09-82	0	CTY		34,092	50,115
5	R01 GM26522-04 21480	CHAN, TEH-SHENG SOMATIC CELL HYBRIDS FOR STUDIES OF HUMAN DISEASES	UNIVERSITY OF TEXAS MED BR GALVESTON	GALVESTON	TEXAS	82	11-82	1	MGN		60,474	81,290

TABLE-1 RESEARCH GRANTS ACTIVE AS OF 09-30-82 BY GRANT NUMBER

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2 R01 GM26524-04 22300	CASTLE, JOHN D EXOCYTOSIS: IN VITRO STUDIES	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83	4	CBY	61,092	94,437
5 R01 GM26525-03 22600	DAVID, CARL W POLYPEPTIDE SOLUTION CONFORMATION PREDICTION	UNIVERSITY OF CONNECTICUT STORRS	STORRS	CONNECTICUT	81	09-82	0	BBCA	48,841	69,038
5 R01 GM26527-03 21750	BORISY, GARY ORGANIZATION AND REPLICATION OF YEAST RIBOSOMAL DNA	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	81	09-82	0	GEN	65,355	92,751
2 R01 GM26536-03A1 22300	HUDSON, BRUCE S FLUORESCENCE STUDIES OF MOTION IN MEMBRANES	UNIVERSITY OF OREGON	EUGENE	OREGON	82	05-83	2	BBCB	42,140	55,436
2 R01 GM26546-05 21280	GROSSMAN, LAWRENCE I GENES ON MITOCHONDRIAL DNA	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	08-83	2	GEN	232,856	298,710
2 R01 GM26548-04 11760	SCHENKMAN, JOHN B ACTIVE OXYGEN GENERATION BY HEPATIC MICROSOMES	UNIVERSITY OF CONNECTICUT HEALTH CENTER	FARMINGTON	CONNECTICUT	82	08-83	4	TOX	76,621	107,237
5 R01 GM26551-03 11380	BENET, LESLIE Z PHARMACOKINETICS IN DISEASE STATES	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	81	07-83	0	SSS	86,452	113,252
5 R01 GM26553-03 11910	MITSCHER, LESTER A VERSATILE SYNTHESIS OF OPTICALLY PURE PROSTAGLANDINS	UNIVERSITY OF KANSAS LAWRENCE	LAWRENCE	KANSAS	81	12-82	0	MCHA	46,398	64,807
5 R01 GM26554-05 22300	HEINZ, ERICH MECHANISM AND FUNCTION OF PROTON FLOWS IN ANIMAL CELLS	CORNELL UNIVERSITY MEDICAL CENTER	NEW YORK	NEW YORK	82	08-83	1	PHY	51,973	76,920
2 R01 GM26556-04 11780	TOZER, THOMAS N FACTORS INFLUENCING SATURABLE FIRST-PASS METABOLISM	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	03-83	3	PHRA	91,734	106,064
5 R01 GM26559-03 22400	HELLER, JOHN S POST-TRANSLATIONAL CONTROL OF ORNITHINE DECARBOXYLASE	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	81	11-82	0	PBC	48,575	75,855
2 R01 GM26566-03A1 22500	EATON, GARETH R BROADENING REAGENTS FOR NITROXYL SPIN PROBES	UNIVERSITY OF DENVER	DENVER	COLORADO	82	08-83	2	BMT	40,555	57,298

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5	R01 GM26568-05 11910	SCHULTZ, ARTHUR G SYNTHESIS OF ASPIDOSPERMA AND DENDROBINE ALKALOIDS	RENSSELAER POLYTECHNIC INSTITUTE	TROY	NEW YORK	82	08-83	1	MCHA	68,508	108,243
5	R01 GM26569-04 11910	PARRY, RONALD J BIOSYNTHESIS OF CYCLOPENTANOIDS	RICE UNIVERSITY	HOUSTON	TEXAS	82	11-82	1	BNP	40,081	54,911
5	R01 GM26574-04 11910	HAUSER, FRANK M STEREOSPECIFIC SYNTHESES OF SELECTED AMINO SUGARS	OREGON GRADUATE CTR STUDY AND RESEARCH	BEAVERTON	OREGON	82	03-83	1	MCHA	38,140	61,162
5	R01 GM26582-05 22400	WEDLER, FREDERICK C CATALYTIC AND REGULATORY MECHANISMS OF KEY ENZYMES	PENNSYLVANIA STATE UNIVERSITY UNIV PARK	UNIVERSITY PARK	PENNSYLVANIA	82	08-83	0	BIO	58,470	79,321
2	R01 GM26588-07 22600	BERNE, BRUCE J MOLECULAR DYNAMICS OF AQUEOUS SOLUTIONS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	04-83	4	BBCA	58,430	97,929
5	R01 GM26600-03 22300	FERGUSON, KAREN A EFFECT OF STEROL ON MEMBRANE-BOUND ENZYMES	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	81	06-83	0	PC	48,889	71,388
5	R01 GM26604-03 11770	LEVITZKI, ALEXANDER BETA-ADRENERGIC RECEPTOR ADENYLATE CYCLASE COMPLEX	HEBREW UNIVERSITY OF JERUSALEM	JERUSALEM	ISRAEL	81	02-83	0	BIO	43,415	43,415
2	R01 GM26608-03A1 12320	LIU, Y KING THE TRAUMATOLOGY OF THE HEAD AND SPINE	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	02-83	2	AFY	84,493	112,806
5	P01 GM26611-04 11300	MITCHELL, JERRY R MOLECULAR BASIS OF HUMAN DRUG TOXICITY	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	07-83	0	PTR	259,533	352,965
5	R01 GM26623-02 22400	WONG, SHAN S ENZYME REGULATION BY PROTEIN-PROTEIN INTERACTION	UNIVERSITY OF LOWELL	LOWELL	MASSACHUSETTS	82	12-82	1	BIO	41,289	70,548
5	R01 GM26624-04 21750	REEDER, RONALD H CONTROL OF RIBOSOMAL GENE TRANSCRIPTION	FRED HUTCHINSON CANCER RESEARCH CENTER	SEATTLE	WASHINGTON	82	07-83	1	MBY	96,516	106,158
5	P01 GM26625-04 22410	REINHOLD, VERNON N GLYCOCONJUGATE STRUCTURAL STUDIES/PROGRAM PROJECT	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	08-83	1	SSS	223,858	427,447

TABLE-1 RESEARCH GRANTS ACTIVE AS OF 09-30-82 BY GRANT NUMBER

T	GRANT NUMBER PROGRAM (FINE CODE)	INVESTIGATOR PROJECT TITLE	GRANTEE INSTITUTION	CITY	STATE	FY	END-DATE	FUT-YRS AVAILABLE	IRG	SUB
								DIRECT		TOTAL
5	R01 GM26631-03 21480	KAO, FA-TEN CELL HYBRIDS CONTAINING SINGLE HUMAN CHROMOSOMES	UNIVERSITY OF COLORADO HLTH SCIENCES CTR	DENVER	COLORADO	82	06-83	0 90,098	MGN	113,614
5	R01 GM26632-03 22200	DIMOND, RANDALL L REGULATION OF DIVERGENT PATHWAYS OF DEVELOPMENT	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	81	02-83	0 77,115	GEN	86,957
2	R01 GM26643-04 22400	THORPE, COLIN FLAVOPROTEINS IN FATTY ACID METABOLISM	UNIVERSITY OF DELAWARE	NEWARK	DELAWARE	82	06-83	4 60,542	PB	85,396
5	R01 GM26659-03 21480	CONNEALLY, P MICHAEL GENETIC LINKAGE STUDIES OF HUNTINGTON'S DISEASE	INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS	INDIANAPOLIS	INDIANA	82	12-82	2 57,436	MGN	82,708
2	R01 GM26666-04 11440	DESIDERIO, DOMINIC M MASS SPECTROMETRY OF BIOLOGICALLY IMPORTANT PEPTIDES	UNIVERSITY OF TENN CENTER HEALTH SCIEN	MEMPHIS	TENNESSEE	82	08-83	2 101,107	BMT	141,481
2	R01 GM26669-04 22300	RAYFIELD, GEORGE W MEMBRANE BIOPHYSICS	UNIVERSITY OF OREGON	EUGENE	OREGON	82	08-83	2 59,889	BBCA	69,674
2	R01 GM26671-04 11920	COUCOUVANIS, DIMITRI N IRON AND MOLYBDENUM COMPLEXES: ENZYME ACTIVE SITES	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	07-83	2 68,420	BMT	90,848
2	R01 GM26676-04 11350	SHEINER, LEWIS B NEW WAYS TO INVESTIGATE AND FORECAST PHARMACOKINETICS	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	08-83	4 115,390	PHRA	146,661
5	R01 GM26680-03 22550	HSU, I-NAN CRYSTALLOGRAPHIC STUDIES OF PENICILLOPEPSIN	CALIFORNIA STATE UNIVERSITY NORTHRIDGE	NORTHRIDGE	CALIFORNIA	82	06-83	0 32,960	BBCB	45,814
5	R01 GM26682-03 22400	JORDAN, FRANK PURINE NUCLEOSIDE PHOSPHORYLASE STUDIES	RUTGERS THE STATE UNIV NEWARK	NEWARK	NEW JERSEY	81	03-83	0 38,917	BIO	61,489
2	R01 GM26689-04 21250	CHAO, LEE RNA POLYMERASE MEDIATED MUTAGENESIS AND DNA REPAIR	MEDICAL UNIVERSITY OF SOUTH CAROLINA	CHARLESTON	SOUTH CAROLINA	82	08-83	2 54,998	MG	71,710
5	R01 GM26690-04 21320	SYPHERD, PAUL S POST-TRANSCRIPTIONAL REGULATION OF GENE EXPRESSION	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	07-83	0 68,977	GEN	96,223

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5	P50 GM26691-04	BENET, LESLIE Z	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	07-83	1	PTR	235,605	297,959
*	11300	PHARMACOKINETICS/PHARMACODYNAMICS									
5	R01 GM26693-03	BONNER, JAMES J	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	81	11-82	0	GEN	47,385	64,960
	21700	MOLECULAR DISSECTION OF GENE REGULATION IN DROSOPHILA									
3	R01 GM26693-03S1	BONNER, JAMES J	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	82	11-82	0	GEN	13,960	20,242
	21700	MOLECULAR DISSECTION OF GENE REGULATION IN DROSOPHILA									
2	R01 GM26698-04	LANGER, ROBERT S	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	06-83	2	PHRA	122,260	167,481
	12300	SURGICAL IMPLANTS FOR SUSTAINED MACROMOLECULAR RELEASE									
2	R01 GM26701-04	VALLEE, RICHARD B	WORCESTER FDN FOR EXPER BIOLOGY	SHREWSBURY	MASSACHUSETTS	82	06-83	2	CBY	81,415	128,733
	22250	STRUCTURE, PHOSPHORYLATION & FUNCTION OF MAPS									
2	R01 GM26706-04	EMERSON, CHARLES P, JR	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	07-83	4	GEN	106,440	148,527
	21600	ORGANIZATION AND REGULATION OF MUSCLE GENES									
5	R01 GM26710-03	WADSWORTH, SAMUEL C	WORCESTER FDN FOR EXPER BIOLOGY	SHREWSBURY	MASSACHUSETTS	81	03-83	0	GEN	60,597	101,448
	21600	TRANSCRIPTIONAL CONTROL OF HEAT SHOCK GENES									
5	R01 GM26711-03	EMERY, THOMAS F	UTAH STATE UNIVERSITY	LOGAN	UTAH	82	02-83	0	BMT	35,645	48,121
	11930	SYNTHESIS AND BIOASSAY OF SIDEROCHROME ANALOGS									
2	R01 GM26713-04	DOUGLAS, MICHAEL G	UNIVERSITY OF TEXAS HLTH SCI CTR SAN ANT	SAN ANTONIO	TEXAS	82	07-83	2	CTY	40,641	54,984
	22300	POST TRANSLATIONAL MODIFICATION IN MEMBRANE BIOGENESIS									
2	R01 GM26715-04	SNYDER, GRAYSON H	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	82	06-83	2	BBCA	68,038	85,733
	22500	STRATEGIES FOR DIRECTING DISULFIDE PAIRING IN PROTEINS									
5	R01 GM26717-03	BLAU, HELEN M	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	81	06-83	0	GEN	49,939	76,774
	21480	MUSCLE DIFFERENTIATION IN HETEROKARYONS									
3	R01 GM26717-03S1	BLAU, HELEN M	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	0	CTY	18,985	29,996
	21480	MUSCLE DIFFERENTIATION IN HETEROKARYONS									

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2	R01 GM26723-04 12930	SMITH, PHILLIP R BIOLOGICAL STRUCTURAL STUDIES USING IMAGE PROCESSING	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82	06-83	4	BBCB	91,899	136,894
2	R01 GM26726-04 22250	JOHNSON, KENNETH A KINETIC ANALYSIS OF THE DYNEIN ATPASE MECHANISM	PENNSYLVANIA STATE UNIVERSITY UNIV PARK	UNIVERSITY PARK	PENNSYLVANIA	82	06-83	2	CBY	92,529	118,950
5	R01 GM26728-03 22400	SEGEL, IRWIN H ENZYMOLOGY OF SULFATE ACTIVATION AND TRANSFER	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	81	10-82	0	BIO	54,185	70,517
5	R01 GM26730-03 22400	DAWSON, JOHN H SPECTROSCOPY AND MECHANISMS OF HEME IRON OXYGENASE	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA	COLUMBIA	SOUTH CAROLINA	81	06-83	0	BMT	38,329	51,589
2	R01 GM26732-04 22250	FARRELL, KEVIN W CONTROL OF MICROTUBULE PROPERTIES AND FUNCTIONS	UNIVERSITY OF CALIFORNIA SANTA BARBARA	SANTA BARBARA	CALIFORNIA	82	06-83	2	CBY	74,948	101,504
2	R01 GM26734-04 22200	PAINE, PHILIP L MECHANISMS OF NUCLEOCYTOPLASMIC PROTEIN DISTRIBUTION	MICHIGAN CANCER FOUNDATION	DETROIT	MICHIGAN	82	06-83	3	MBY	64,672	108,683
2	R01 GM26738-04 22400	TRAUGH, JOLINDA A CYCLIC NUCLEOTIDE-INDEPENDENT PHOSPHORYLATION	UNIVERSITY OF CALIFORNIA RIVERSIDE	RIVERSIDE	CALIFORNIA	82	06-83	2	MBY	57,901	77,190
5	R01 GM26740-04 21310	ROSE, KATHLEEN M REGULATION OF RNA POLYMERASE I GENE EXPRESSION	PENNSYLVANIA STATE UNIV HERSHEY MED CTR	HERSHEY	PENNSYLVANIA	82	06-83	1	BIO	30,971	41,501
5	R01 GM26742-03 21600	PINON, RAMON, JR FOLDED CHROMOSOMES FROM MITOTIC AND MEIOTIC CELLS	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	81	12-82	0	CBY	64,517	84,517
2	R01 GM26743-04 22200	MALLER, JAMES L CONTROL OF CELL DIVISION BY CYCLIC AMP	UNIVERSITY OF COLORADO HLTH SCIENCES CTR	DENVER	COLORADO	82	06-83	2	CP	58,610	73,031
2	R01 GM26745-04 NS 13200	MATTEO, RICHARD S PHARMACOKINETICS, MUSCLE RELAXANTS & ANTAGONISTS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	06-83	2	SAT	49,814	84,534
2	R01 GM26755-04 22300	SCHEKMAN, RANDY BIOLOGICAL STUDIES OF EUCARYOTIC CELL SURFACE GROWTH	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	06-83	4	CP	101,600	139,980

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5	R01 GM26756-03 21750	SCHMIDT, FRANCIS J GENE STRUCTURE OF AN RNA PROCESSING ENZYME	UNIVERSITY OF MISSOURI COLUMBIA	COLUMBIA	MISSOURI	82	03-83 34,995	0	MBC	44,794
5	R01 GM26758-02 21800	WATT, WARD B NATURAL GENETIC VARIATION: IN VIVO METABOLIC IMPACT	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	11-82 58,014	1	GEN	90,502
2	R01 GM26760-04 11940	NICHOLAS, KENNETH M SYNTHETIC UTILITY OF METAL-STABILIZED CARBENIUM IONS	BOSTON COLLEGE	CHESTNUT HILL	MASSACHUSETTS	82	06-83 35,669	2	BMT	51,963
2	R01 GM26763-04 22300	JACKSON, ROBERT C BIOSYNTHESIS AND SEGREGATION OF SECRETORY PROTEINS	DARTMOUTH COLLEGE	HANOVER	NEW HAMPSHIRE	82	08-83 64,000	2	CBY	92,596
5	R01 GM26764-03 22450	SANADI, D RAO HYDROGEN ION TRANSLOCATION--VESICLES & PLANAR BILAYERS	BOSTON BIOMEDICAL RESEARCH INSTITUTE	BOSTON	MASSACHUSETTS	81	12-82 52,071	0	BIO	76,588
2	R01 GM26765-04 21750	NEVINS, JOSEPH R CELLULAR & ADENOVIVRUS GENE EXPRESSION	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	06-83 71,343	2	MBY	110,869
5	R01 GM26767-03 22550	FENNA, ROGER E STRUCTURAL STUDIES OF LACTOSE SYNTHETASE	UNIVERSITY OF MIAMI	MIAMI	FLORIDA	82	11-82 26,250	0	BBCB	41,819
5	R01 GM26770-04 21750	CHAPMAN, VERNE M NEW GLUCURONIDASE REGULATORY VARIANTS IN MICE	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	06-83 99,669	1	GEN	148,351
5	R01 GM26775-03 11790	KOECHEL, DANIEL A RENAL NECROSIS INDUCED BY CHEMICALS	MEDICAL COLLEGE OF OHIO AT TOLEDO	TOLEDO	OHIO	81	06-83 45,598	0	TOX	63,345
2	R01 GM26782-04 11940	ROUSH, WILLIAM R INTRAMOLECULAR DIELS-ALDER REACTIONS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	06-83 61,068	2	MCHA	92,003
5	R01 GM26784-03 22250	REBHUN, LIONEL I ISOLATION AND CHARACTERIZATION OF MITOTIC ORGANELLES	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	81	12-82 56,394	0	CTY	80,421
5	R01 GM26796-03 21320	MERRICK, WILLIAM C MECHANISM OF PROTEIN SYNTHESIS INITIATION	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	81	03-83 58,299	0	PC	85,991

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5	R01 GM26802-03 22250	MULLINS, JAMES M STRUCTURAL AND CHEMICAL ANALYSIS OF THE MIDBODY	CATHOLIC UNIVERSITY OF AMERICA	WASHINGTON	DIST OF COL	81	02-83	0	CBY		19,399	29,226
5	R01 GM26803-03 21600	LEFFAK, IRA M CHROMATIN STRUCTURE AND REPLICATION	WRIGHT STATE UNIVERSITY	DAYTON	OHIO	81	12-82	0	CTY		45,616	66,221
5	R01 GM26808-03 21750	KLASS, MICHAEL R CELL-SPECIFIC GENE EXPRESSION	UNIVERSITY OF HOUSTON AT HOUSTON	HOUSTON	TEXAS	81	08-83	0	GEN		50,518	65,673
2	R01 GM26809-04 12820	ROY, RABINDRA N PH MEASUREMENT STANDARDS OF BLOOD IN ISOTONIC SALINE	DRURY COLLEGE	SPRINGFIELD	MISSOURI	82	06-83	2	BMT		11,040	15,317
2	R01 GM26810-04 21700	LINDSLEY, DAN L GAMETOGENESIS IN DROSOPHILA	UNIVERSITY OF CALIFORNIA SAN DIEGO LA JOLLA		CALIFORNIA	82	05-83	2	GEN		122,368	159,992
2	R01 GM26832-04 AI 21320	BODLEY, JAMES W AMINO ACID X--STRUCTURE/DISTR/BIOSYNTHESIS/FUNCTION	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	06-83	4	PC		65,436	88,226
5	R01 GM26834-03 22400	HORNER, WILLIAM H GUANIDINE METABOLISM IN MAMMALS	GEORGETOWN UNIVERSITY	WASHINGTON	DIST OF COL	82	03-83	0	PBC		42,043	59,862
5	R01 GM26838-03 11920	SIH, CHARLES J MICROBIAL DEGRADATION OF STEROL SIDE CHAINS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	12-82	1	MCHA		53,535	75,362
5	R01 GM26843-03 22200	INOUYE, MASAYORI MORPHOGENESIS AND GENE EXPRESSION	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	03-83	0	MBC		62,383	94,084
5	R01 GM26850-03 12910	LIZZI, FREDERIC L ADVANCED CLINICAL ULTRASONIC TISSUE CHARACTERIZATION	RIVERSIDE RESEARCH INSTITUTE	NEW YORK	NEW YORK	82	01-83	1	RNM		218,412	285,504
5	R01 GM26857-03 12990	SALZMAN, GARY C BIOMEDICAL APPLICATIONS OF LIGHT-SCATTER TECHNOLOGY	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	03-83	0	SSS		81,498	81,498
2	R01 GM26861-04 22300	JENNINGS, MICHAEL L BIOCHEMICAL STUDIES OF ERYTHOCYTE ANION TRANSPORT	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	06-83	4	PB		78,215	99,083

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2	R01 GM26863-04 AI 21750	FIGURSKI, DAVID H REPRODUCTION OF EXTRACHROMOSOMAL ELEMENTS IN BACTERIA	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	08-83	2	MG		65,434	105,465
5	R01 GM26864-04 22600	MC QUARRIE, DONALD A FORCE BALANCE IN POLYELECTROLYTE SYSTEMS	UNIVERSITY OF CALIFORNIA	DAVIS DAVIS	CALIFORNIA	82	11-82	1	BBCB		34,650	45,392
2	R01 GM26867-04 11930	MILLER, MARVIN J SYNTHESIS OF BETA-LACTAMS FROM HYDROXAMIC ACIDS	UNIVERSITY OF NOTRE DAME	NOTRE DAME	INDIANA	82	06-83	2	BNP		86,048	120,723
5	R01 GM26870-03 21100	CHAPMAN, TOBY M GRAFT POLYMERS AS SUPPORTS FOR NUCLEIC ACID SYNTHESIS	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	06-83	0	BNP		39,316	57,959
2	R01 GM26874-04 22300	HO, CHIEN NMR AND BIOCHEMICAL STUDIES OF BIOLOGICAL MEMBRANES	CARNEGIE-MELLON UNIVERSITY	PITTSBURGH	PENNSYLVANIA	82	12-82	4	BBCB		125,050	178,975
5	R01 GM26875-04 22250	KIRSCHNER, MARC W BIOCHEMICAL STUDIES OF MITOSIS	UNIVERSITY OF CALIFORNIA	SAN FRANCISCO SAN FRANCISCO	CALIFORNIA	82	11-82	3	MBY		155,975	203,087
2	R01 GM26878-04 AI 21750	STAUFFER, GEORGE V REGULATION OF ONE CARBON METABOLISM	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	06-83	2	MG		70,348	92,051
2	R01 GM26879-04 11910	NICOLAOU, KYRIACOS C "TOTAL SYNTHESIS OF MACROLIDE ANTIBIOTICS"	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	08-83	1	MCHA		80,001	128,102
5	R01 GM26892-04 21100	HATTMAN, STANLEY M ANALYSIS OF DNA MODIFICATION BY MASS SPECTROMETRY	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	06-83	0	SSS		111,926	167,676
5	R01 GM26894-04 22300	BILTONEN, RODNEY L A MODEL CALCIUM TRANSPORT SYSTEM	UNIVERSITY OF VIRGINIA	CHARLOTTESVILLE CHARLOTTESVILLE	VIRGINIA	82	06-83	1	BBCB		71,696	103,284
5	R01 GM26895-04 22550	JURNAK, FRANCES A CRYSTALLOGRAPHIC STUDIES OF PROTEIN ELONGATION FACTORS	UNIVERSITY OF CALIFORNIA	RIVERSIDE RIVERSIDE	CALIFORNIA	82	07-83	0	BBCB		26,982	36,187
5	R01 GM26897-03 22300	SZABO, GABOR STRUCTURE-FUNCTION RELATIONSHIPS FOR GATABLE CHANNELS	UNIVERSITY OF TEXAS MED BR	GALVESTON GALVESTON	TEXAS	81	07-83	0	BBCB		35,020	46,587

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5	R01 GM26898-04 22300	URRY, DAN W CHANNEL MECHANISMS FOR PERMEATION OF BIOMEMBRANES	UNIVERSITY OF ALABAMA IN BIRMINGHAM	BIRMINGHAM	ALABAMA	82	06-83	1	BBCB	80,619	105,473
5	R01 GM26900-03 22400	IVES, DAVID H MECHANISMS OF NUCLEOSIDE KINASE REGULATION	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	81	06-83	0	BIO	33,228	45,115
5	R01 GM26901-04 21600	BRADBURY, EDWIN M CHROMATIN, HISTONE MODIFICATIONS AND HMG PROTEINS	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	07-83	0	MBY	142,120	193,684
5	R01 GM26902-03 11890	LIETMAN, PAUL S ANTIBIOTIC TOXICITY: BIOCHEMICAL & CLINICAL PHARMACOLOGY	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	81	06-83	0	SSS	110,255	165,383
5	R01 GM26905-03 22550	RUBIN, BYRON H THREE-DIMENSIONAL STRUCTURE OF CHLOROPEROXIDASE	EMORY UNIVERSITY	ATLANTA	GEORGIA	81	07-83	0	BBCB	28,808	39,298
5	R01 GM26908-03 11920	LIOTTA, DENNIS C IMPORTANT COMPOUNDS VIA ORGANOSELENIUM REAGENTS	EMORY UNIVERSITY	ATLANTA	GEORGIA	81	03-83	0	MCHA	38,211	54,420
2	R01 GM26916-04 22450	FERGUSON-MILLER, SHELAGH M ORGANIZATION AND CONTROL OF ELECTRON TRANSFER CHAINS	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	06-83	4	PB	66,942	90,364
5	R01 GM26924-03 22450	PULLMAN, MAYNARD E ROLE OF ATPASE INHIBITOR IN OXIDATIVE PHOSPHORYLATION	PUBLIC HLTH RES INST OF THE CITY OF NY	NEW YORK	NEW YORK	82	11-82	2	DIO	59,378	80,998
5	R01 GM26935-04 12820	ANDERSEN, NIELS H ASSAY METHODS FOR ARACHIDONIC ACID METABOLITES	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	06-83	0	BMT	60,092	80,523
2	R01 GM26937-04 21320	BOURQUE, DON P MOLECULAR BIOLOGY OF CHLOROPLAST RIBOSOMES	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	08-83	4	CTY	83,049	112,318
2	R01 GM26938-04 21200	ZAKIAN, VIRGINIA A DNA REPLICATION AND CHROMOSOME STRUCTURE IN YEAST	FRED HUTCHINSON CANCER RESEARCH CENTER	SEATTLE	WASHINGTON	82	06-83	2	GEN	102,000	112,138
2	R01 GM26939-04 21750	MARCU, KENNETH B REGULATION OF EXPRESSION OF EUKARYOTIC GENE FAMILIES	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	06-83	2	MGN	61,916	90,747

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5	R01 GM26941-03 21480	TYE, BIK-KWOON THE STRUCTURAL GENE FOR A YEAST PHEROMONE	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	04-83	0	GEN		43,631	63,287
2	R01 GM26950-04 13200	UEDA, ISSAKU ANESTHETIC INTERACTION WITH MODEL PROTEINS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	06-83	2	SAT		53,285	69,053
5	R01 GM26956-03 13410	SANCES, ANTHONY, JR ELECTRICAL BURN INJURY STUDIES	MEDICAL COLLEGE OF WISCONSIN	MILWAUKEE	WISCONSIN	81	12-82	0	SAT		66,033	87,694
2	R01 GM26968-04 22200	NOLL, HANS CELL SURFACE PROTEINS IN EMBRYOGENESIS	NORTHWESTERN UNIVERSITY	EVANSTON	ILLINOIS	82	07-83	2	CP		101,640	133,703
5	R01 GM26973-04 22250	GOROVSKY, MARTIN A CONTROL OF GENE ACTIVITY AND ORGANELLE BIOGENESIS	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	06-83	0	MBY		80,001	137,722
5	R01 GM26976-03 22300	RUDY, BERNARDO ANALYSIS OF VOLTAGE-DEPENDENT CHANNELS IN VITRO	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	81	03-83	0	BBCB		47,863	68,923
5	R01 GM26980-03 22300	WALDBILLIG, RONALD C MEMBRANE SOLUBILITY OF ANESTHETICS IN BILAYER NERVE	UNIVERSITY OF TEXAS MED BR GALVESTON	GALVESTON	TEXAS	82	11-82	0	BBCB		61,800	83,080
5	R01 GM26981-04 22500	HUDSON, BRUCE S RESONANCE ENHANCED SPECTROSCOPY	UNIVERSITY OF OREGON	EUGENE	OREGON	82	12-82	0	BBCB		41,455	55,046
5	R01 GM26985-03 21320	KOZARICH, JOHN W CHEMISTRY AND BIOCHEMISTRY OF 7-METHYLGUANOSINE	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	07-83	0	BIO		47,240	78,323
5	R01 GM26986-03 21250	EHRLICH, MELANIE MUTAGENESIS AT 5-METHYLCYTOSINE RESIDUES IN DNA	TULANE UNIVERSITY OF LOUISIANA	NEW ORLEANS	LOUISIANA	81	08-83	0	BIO		35,096	46,947
5	R01 GM26988-03 21100	ENGEL, ROBERT R A CHEMICAL APPROACH TO GENETIC REGULATION	QUEENS COLLEGE	NEW YORK	NEW YORK	82	12-82	0	MCHA		53,790	88,108
5	R01 GM26994-03 21280	SCHWARTZBACH, STEVEN D REGULATION OF ORGANELLE BIOGENESIS	UNIVERSITY OF NEBRASKA LINCOLN	LINCOLN	NEBRASKA	81	01-83	0	BIO		33,121	45,707

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5	R01 GM26998-03 21280	GOLLUB, EDITH G HEME REGULATION OF MACROMOLECULAR CELL COMPONENTS	BARNARD COLLEGE	NEW YORK	NEW YORK	82	02-83	0	GEN		51,192	79,240
5	R01 GM27002-06 21100	BOBST, ALBERT M SPIN ASSAY FOR NUCLEIC ACID BINDING PROTEINS	UNIVERSITY OF CINCINNATI	CINCINNATI	OHIO	82	02-83	2	BBCA		47,698	66,777
5	R01 GM27003-13 22400	VAN ETTEN, RUBERT L THE ACTIVE SITES OF ACID PHOSPHATASES	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	06-83	1	BIO		71,890	96,878
5	R01 GM27013-03 22400	AULL, JOHN L ISOLATION AND CHARACTERIZATION OF DEUTERATED ENZYMES	AUBURN UNIVERSITY AT AUBURN	AUBURN	ALABAMA	81	02-83	0	BBCB		44,304	62,492
5	R01 GM27014-03 21800	GREENBAUM, IRA F CHROMOSOMAL REARRANGEMENT INCORPORATION IN MAMMALS	TEXAS AGRI AND MECH UNIV	COLLEGE STATION	TEXAS	82	02-83	0	MGN		45,783	58,480
5	R01 GM27018-06 21400	HARRIS, HARRY INHERITED HUMAN ENZYME DIVERSITY	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	02-83	2	MGN		91,697	151,300
5	R01 GM27021-03 21800	TEMPLETON, ALAN R SELECTION, COADAPTATION AND SPECIATION IN DROSOPHILA	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	06-83	0	GEN		32,260	50,003
5	R01 GM27022-03 11930	CARPENTER, BARRY K TEST OF A NEW THEORY ON STRUCTURE AND REACTIVITY	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	12-82	0	MCHA		44,814	70,600
5	R01 GM27024-03 22550	CZERWINSKI, EDMUND W STRUCTURAL STUDIES OF ISOCITRATE DEHYDROGENASE	UNIVERSITY OF TEXAS MED BR GALVESTON	GALVESTON	TEXAS	82	12-82	0	BBCA		41,450	55,083
5	P01 GM27028-03 11700	WEBER, WENDELL W EXPERIMENTAL AND CLINICAL PHARMACOGENETICS	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	12-82	2	SRC		188,808	298,317
3	P01 GM27028-0351 11700	WEBER, WENDELL W EXPERIMENTAL AND CLINICAL PHARMACOGENETICS	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	12-82	2	SRC		6,227	9,839
5	R01 GM27029-13 12840	RINEHART, KENNETH L, JR HIGH RESOLUTION MASS SPECTRA OF BIOORGANIC COMPOUNDS	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	04-83	1	SSS		75,607	107,664

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5	R01 GM27036-03 22500	BRYAN, WILLIAM P THE ROLE OF WATER IN PROTEIN STRUCTURE AND FUNCTION	INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS	INDIANAPOLIS	INDIANA	82	03-83 36,510	0	BBCA	52,574
5	R01 GM27039-03 12840	MC IVER, ROBERT T, JR FOURIER TRANSFORM MASS SPECTROMETRY	UNIVERSITY OF CALIFORNIA	IRVINE IRVINE	CALIFORNIA	82	11-82 44,100	0	SSS	57,771
5	R01 GM27042-06 22300	CIANI, SERGIO SELECTIVE ION PERMEATION IN EXCITABLE CELLS	UNIVERSITY OF CALIFORNIA	LOS ANGELES LOS ANGELES	CALIFORNIA	82	11-82 54,000	0	PHY	70,120
5	R01 GM27043-03 22450	TEDESCHI, HENRY THE ELECTRICAL PROPERTIES OF TRANSDUCING MEMBRANES	STATE UNIVERSITY OF NEW YORK AT ALBANY	ALBANY	NEW YORK	82	12-82 46,586	1	BIO	65,983
5	R01 GM27046-03 21100	ALLEN, FRITZ S AN ELECTRIC DICHROISM STUDY OF DNA & DNA-DRUG ADDUCTS	UNIVERSITY OF NEW MEXICO	ALBUQUERQUE ALBUQUERQUE	NEW MEXICO	82	12-82 28,029	0	BBCA	37,586
5	R01 GM27049-03 22300	FISHER, KNUTE A SPLIT MEMBRANE LIPIDS AND POLYPEPTIDES	UNIVERSITY OF CALIFORNIA	SAN FRANCISCO SAN FRANCISCO	CALIFORNIA	82	01-83 61,490	0	MBY	79,477
2	R01 GM27053-04A1 HL 21600	SUNG, MICHAEL T CHROMATIN STRUCTURE - MAPPING HISTONE/DNA DOMAINS	SOUTHERN ILLINOIS UNIVERSITY CARBONDALE	CARBONDALE	ILLINOIS	82	03-83 64,400	2	MBY	86,101
5	P01 GM27057-03 22300	STOECKENIUS, WALTHER LIGHT-ENERGY AND SIGNAL-TRANSDUCTING MEMBRANES	UNIVERSITY OF CALIFORNIA	SAN FRANCISCO SAN FRANCISCO	CALIFORNIA	82	05-83 492,047	2	SSS	643,111
5	R01 GM27058-03 11910	TANABE, MASATO STEREOSPECIFIC SYNTHESIS OF STEROL SIDE CHAINS	SRI INTERNATIONAL	MENLO PARK	CALIFORNIA	81	02-83 46,827	0	SSS	89,694
2	R01 GM27061-04 12930	CHIU, WAH ELECTRON MICROSCOPY ANALYSIS OF DNA-BINDING PROTEIN	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	06-83 77,220	2	BBCB	104,216
5	R01 GM27064-03 21280	SIEGEL, ALBERT MAPPING THE TOBACCO RATTLE VIRUS GENOME	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	82	12-82 50,773	0	VR	71,132
5	R01 GM27065-03 22450	STREKAS, THOMAS C REDOX EFFECTS OF AXIAL LIGAND BONDING IN CYTOCHROMES	QUEENS COLLEGE	NEW YORK	NEW YORK	82	11-82 39,933	0	BMT	65,410

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5	R01 GM27068-03 21750	ROTH, JOHN R GENETIC ANALYSIS OF BACTERIAL CHROMOSOME STRUCTURE	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	11-82	0	MBC		36,554	52,103
5	R01 GM27069-03 13200	HORNBEIN, THOMAS F BRAIN HYPOXIA IN INTRAOPERATIVE HYPOTENSION-HEMODILUTION	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	02-83	0	SAT		49,635	63,500
5	R01 GM27076-03 22550	SWEET, ROBERT M X-RAY DIFFRACTION STUDIES OF PHYCOBILISOME ASSEMBLY	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	12-82	0	BBCB		49,270	64,544
5	R01 GM27077-03 21280	PLATE, CHARLES A GENETICS & BIOCHEMISTRY OF ENERGY COUPLING IN E COLI	NORTHWESTERN UNIVERSITY	CHICAGO	ILLINOIS	82	12-82	0	MBC		44,077	60,826
5	R01 GM27083-03 22400	HAMILTON, GORDON A SOME OXIDASE CATALYZED REACTIONS INVOLVING GLYOXYLATE	PENNSYLVANIA STATE UNIVERSITY UNIV PARK	UNIVERSITY PARK	PENNSYLVANIA	82	11-82	0	BIO		34,160	46,098
5	R01 GM27085-03 22450	WEBSTER, DALE A A MODEL FOR COMPLEX ELECTRON TRANSPORT CHAINS	ILLINOIS INSTITUTE OF TECHNOLOGY	CHICAGO	ILLINOIS	82	12-82	1	BIO		47,615	80,082
5	R01 GM27087-03 22300	LEVITZKI, ALEXANDER THE ADENOSINE RECEPTOR AND ITS MODE OF COUPLING	HEBREW UNIVERSITY OF JERUSALEM	JERUSALEM	ISRAEL	82	03-83	0	BIO		46,728	46,728
5	R01 GM27096-03 21480	USHER, DAVID C REGULATION OF TWO GENES LINKED TO AN IGK CHAIN GENE	UNIVERSITY OF DELAWARE	NEWARK	DELAWARE	82	12-82	0	MGN		49,518	76,498
5	R23 GM27098-03 13450	POLLARD, RICHARD B HERPESVIRUSES AND IMMUNITY IN BURNED CHILDREN	UNIVERSITY OF TEXAS MED BR GALVESTON	GALVESTON	TEXAS	82	12-82	0	VR		34,726	46,880
5	R01 GM27099-03 21280	YOUNG, RYLAND F CONTROL OF VIRUS-INDUCED CELL LYSIS	TEXAS AGRI AND MECH UNIV COLLEGE STATION	COLLEGE STATION	TEXAS	82	12-82	0	EVR		46,930	60,540
5	R01 GM27100-03 22550	ARGOS, PATRICK STRUCTURAL STUDIES OF THE PHOSPHORIBOSYLTRANSFERASES	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	05-83	0	BBCB		36,860	50,636
5	R01 GM27102-03 21480	DAVISSON, MURIEL T ROBERTSONIAN CHROMOSOMES OF THE MOUSE	JACKSON LABORATORY	BAR HARBOR	MAINE	82	04-83	0	MGN		69,267	105,828

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5	R01 GM27103-03 21200	HOLLOMAN, WILLIAM K ENZYMOLOGY OF GENETIC RECOMBINATION	UNIVERSITY OF FLORIDA	GAINESVILLE	FLORIDA	82	12-82	0	GEN		52,917	76,412
2	R01 GM27109-03 11930	MATTESON, DONALD S AMINO BORONIC ACIDS	WASHINGTON STATE UNIVERSITY	PULLMAN	WASHINGTON	82	08-83	2	BMT		29,932	42,951
5	R01 GM27111-03 21200	BENDER, ROBERT A CONTROL OF DNA REPLICATION IN CAULOBACTER DEVELOPMENT	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	12-82	0	MBC		40,891	64,608
5	R01 GM27113-02 21750	WOLF, RICHARD E, JR GROWTH RATE-DEPENDENT CONTROL OF GENE EXPRESSION	UNIVERSITY OF MARYLAND BALT CO CAMPUS	CATONSVILLE	MARYLAND	82	03-83	1	MG		59,699	88,802
5	R01 GM27115-03 21480	VONDER HAAR, RAYMOND A FRAMESHIFT MUTANTS AND SUPPRESSORS IN MAMMALIAN CELLS	TEXAS AGRI AND MECH UNIV	COLLEGE STATION COLLEGE STATION	TEXAS	82	12-82	0	MGN		23,092	29,789
5	R01 GM27117-03 21750	LUTTER, LEONARD C THE STRUCTURE OF TRANSCRIBING CHROMATIN	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	12-82	0	MBY		38,584	60,963
5	R01 GM27120-03 21800	LANDE, RUSSELL S CORRELATED CHARACTERS IN COMPLEX GENETIC SYSTEMS	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	08-83	0	GEN		20,820	35,186
5	R01 GM27123-03 22550	PETSKO, GREGORY A CRYSTALLOGRAPHIC STUDIES OF PROTEIN DYNAMICS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	11-82	0	BBCB		22,330	35,650
5	R01 GM27124-03 22250	PICKETT-HEAPS, J D CELL DIVISION STUDIES USING THE DIATOM SPINDLE	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	02-83	1	CBY		47,391	64,096
5	R01 GM27127-03 22300	WESTERMAN, PHILIP W DMR STUDIES OF PROTEIN-PHOSPHOLIPID BILAYER MEMBRANES	NORTHEASTERN OHIO UNIVERSITIES COLL MED	ROOTSTOWN	OHIO	82	12-82	0	BBCB		46,600	58,012
5	R01 GM27135-03 11940	MORGAN, STEPHEN L PYROLYSIS GC-MS OF BIOMEDICALLY IMPORTANT COMPOUNDS	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA	COLUMBIA	SOUTH CAROLINA	82	07-83	0	SSS		31,217	45,296
5	R01 GM27137-03 11940	KEANA, JOHN F NEW PROBES AND REAGENTS FOR BIOLOGICAL STUDIES	UNIVERSITY OF OREGON	EUGENE	OREGON	82	01-83	1	MCHA		56,069	75,046

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5	R01 GM27139-03 21320	MARTIN, TERENCE E MESSENGER RNA: PROTEIN COMPLEXES AND PROTEIN SYNTHESIS	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	06-83	0	MBY	47,777	79,018
5	R01 GM27140-02 22300	KOHLER, SUSAN J 31P AND 2H NMR INVESTIGATION OF PHOSPHOLIPID BILAYERS	MOUNT HOLYOKE COLLEGE	SOUTH HADLEY	MASSACHUSETTS	81	11-82	0	BBCB	24,186	35,335
5	R01 GM27143-03 21320	GOLDSTEIN, RICHARD MECHANISM OF THE SWITCH BETWEEN TWO CAPSID SIZES	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	11-82	0	VR	26,102	51,108
5	R01 GM27144-03 22550	COOK, WILLIAM J THE MOLECULAR STRUCTURE OF UBIQUITIN	UNIVERSITY OF ALABAMA IN BIRMINGHAM	BIRMINGHAM	ALABAMA	82	03-83	0	BBCB	12,870	17,477
5	R01 GM27148-03 21280	BLUMENTHAL, THOMAS OVERLAPPING GENES OF RNA PHAGES	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	82	11-82	0	VR	41,434	58,785
5	R01 GM27151-03 11760	WATERMAN, MICHAEL R MOLECULAR BASIS OF CYTOCHROME P-450 INDUCTION	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	03-83	0	BIO	15,461	20,950
5	R01 GM27153-03 22200	MC KANNA, JAMES A E.M. STUDIES OF CELLS AND EPIDERMAL GROWTH FACTOR	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	06-83	0	CP	66,752	107,471
5	R01 GM27155-03 22300	BLOBEL, GUNTER K TRANSLOCATION OF PROTEINS ACROSS MEMBRANES	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	11-82	2	MBY	186,354	286,612
5	R01 GM27159-03 21320	RECHSTEINER, MARTIN C MICROINJECTION STUDIES ON PROTEIN DEGRADATION	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	12-82	2	CTY	54,533	79,073
3	R01 GM27159-03S1 21320	RECHSTEINER, MARTIN C MICROINJECTION STUDIES ON PROTEIN DEGRADATION	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	12-82	2	CTY	8,669	12,570
5	R01 GM27160-03 22300	ELSON, ELLIOT L BIOPHYSICAL STUDIES OF CELL DEFORMABILITY	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	11-82	1	MBY	75,960	117,174
5	R01 GM27165-02 12990	GLASER, EDMUND M INTERACTIVE CAMERA LUCIDA COMPUTER-MICROSCOPE	UNIVERSITY OF MARYLAND AT BALTIMORE	BALTIMORE	MARYLAND	81	12-82	0	SB	46,901	78,325

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5	R01 GM27167-03 11850	BODOR, NICHOLAS S REDOX SYSTEMS FOR DELIVERY OF DRUGS TO THE BRAIN	UNIVERSITY OF FLORIDA	GAINESVILLE	FLORIDA	82	11-82	0	PHRA		42,655	60,173
5	R01 GM27168-03 21320	ROBERTSON, HUGH D RNA PROCESSING ENZYMES IN HELA CELLS	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	03-83	0	PBC		31,400	47,755
5	R01 GM27170-03 22300	ROESKE, ROGER W CHARACTERIZATION OF MEMBRANE-ACTIVE PEPTIDES	INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS	INDIANAPOLIS	INDIANA	82	11-82	0	BBCA		65,890	88,954
5	R01 GM27171-03 22300	LANGDON, ROBERT G MECHANISM OF GLUCOSE TRANSPORT THROUGH BIOMEMBRANES	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	07-83	0	PB		62,477	90,592
5	R23 GM27172-03 13250	PRIANO, LAWRENCE L ACTION OF I V ANESTHETICS ON REGIONAL BLOOD FLOWS	UNIVERSITY OF TEXAS MED BR GALVESTON	GALVESTON	TEXAS	82	12-82	0	SAT		24,250	32,738
5	R01 GM27176-03 21320	WISHNIA, ARNOLD PRESSURE-JUMP STUDIES OF RIBOSOMES	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	12-82	0	BBCA		42,701	63,177
5	R01 GM27179-02 11920	LAVALLEE, DAVID K MODELS FOR STUDY OF METALLOPROTEIN REDOX MECHANISMS	HUNTER COLLEGE	NEW YORK	NEW YORK	82	05-83	1	BMT		30,766	49,810
5	R01 GM27195-03 21700	DENELL, ROBIN E A DEVELOPMENTAL GENETIC ANALYSIS OF THE CELL SURFACE	KANSAS STATE UNIVERSITY	MANHATTAN	KANSAS	82	12-82	0	GEN		40,178	56,633
5	R01 GM27200-03 22450	CRONIN, JOHN R NMR OF CHEMICALLY MODIFIED HEART MUSCLE CYTOCHROME C	ARIZONA STATE UNIVERSITY	TEMPE	ARIZONA	82	06-83	0	BBCB		22,925	34,158
5	R01 GM27201-03 21320	HILL, WALTER E PHYSICAL STUDIES OF RIBOSOMAL PROTEINS	UNIVERSITY OF MONTANA	MISSOULA	MONTANA	82	12-82	0	BBCA		54,414	75,908
5	R01 GM27203-02 22200	WANG, JOHN L MOLECULAR ANALYSIS OF GROWTH REGULATORY FACTOR	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	01-83	1	CP		46,246	62,747
5	R01 GM27208-02 22450	HAWKRIDGE, FRED M ELECTRON TRANSFER AT SURFACE ELECTRODES	VIRGINIA COMMONWEALTH UNIVERSITY	RICHMOND	VIRGINIA	81	02-83	0	BMT		23,973	36,918

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5	R01 GM27210-02 21320	WU, JOSEPH M TRANSLATIONAL CONTROL MECHANISMS	NEW YORK MEDICAL COLLEGE	VALHALLA	NEW YORK	82	12-82	1	BIO	46,296	73,561
5	R01 GM27214-03 21320	MORRISON, MARCELLE R MESSENGER RNA STRUCTURE, METABOLISM AND FUNCTION	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	12-82	0	PC	40,938	55,471
5	R01 GM27215-03 21320	KIRK, DAVID L ANALYSIS OF CONTROL GENE ACTION IN VOLVOX DEVELOPMENT	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	12-82	0	CBY	62,340	96,627
5	R01 GM27219-03 21200	BERNSTEIN, HARRIS DNA REPLICATION AND REPAIR IN PHAGE T4	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	11-82	0	MBC	58,748	84,010
5	R01 GM27220-03 22200	BARNES, LARRY D MODULATION OF THE CELL CYCLE BY CYCLIC NUCLEOTIDES	UNIVERSITY OF TEXAS HLTH SCI CTR SAN ANT	SAN ANTONIO	TEXAS	82	12-82	0	CBY	33,143	45,074
5	R01 GM27226-03 13700	BRONZINO, JOSEPH D BRAIN STEM MECHANISMS INVOLVED IN PAIN MODULATION	TRINITY COLLEGE	HARTFORD	CONNECTICUT	82	12-83	0	NEUA	39,319	63,644
5	R01 GM27228-03 21600	CHALKLEY, ROGER G REPLICATION AND ACETYLATION OF HEPATOMA CHROMATIN	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	12-82	0	CTY	68,085	93,957
5	R01 GM27229-03 13410	LEWIS, FRANK R, JR LUNG WATER AND PULMONARY CAPILLARY PERMEABILITY	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	01-83	2	SAT	62,429	81,782
5	R01 GM27230-03 21320	WINICOV, ILGA B RNA PHOSPHORYLATION ROLE IN EUCARYOTIC RNA PROCESSING	UNIVERSITY OF NEVADA RENO	RENO	NEVADA	82	06-83	0	MBY	32,844	45,982
5	R01 GM27235-03 21320	CASKEY, CHARLES T MAMMALIAN CELL PROTEIN SYNTHESIS MUTANTS	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	12-82	0	MBY	60,038	81,652
5	R01 GM27236-03 21600	BHORJEE, JASWANT S HIGH AFFINITY PROTEINS IN CHROMOSOME ORGANIZATION	UNIVERSITY OF ILLINOIS CHICAGO CIRCLE	CHICAGO	ILLINOIS	82	07-83	0	CTY	36,352	53,872
5	R01 GM27239-03 22400	INGRAHAM, LLOYD L FLAVINS IN HYDROXYLATION AND BIOLUMINESCENCE	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	03-83	0	BIO	34,086	44,653

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5	R01 GM27241-03 21750	COHEN, STANLEY N GENE EXPRESSION IN HETEROSPECIFIC ENVIRONMENTS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	11-82 102,281	2	SSS	161,604
5	R01 GM27242-03 21200	SALAS, MARGARITA DNA-PROTEIN COMPLEX OF BACILLUS SUBTILIS PHAGE 29	AUTONOMOUS UNIVERSITY OF MADRID	MADRID	SPAIN	82	12-82 34,771	0	MBC	34,771
5	R01 GM27243-03 22300	BROWN, ELLEN B RAMAN SPECTROSCOPIC STUDIES OF MEMBRANE COMPONENTS	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	82	08-83 13,370	0	BBCB	18,176
5	R23 GM27245-03 13450	SUGERMAN, HARVEY J PATHOPHYSIOLOGIC EFFECTS OF PERITONITIS	VIRGINIA COMMONWEALTH UNIVERSITY	RICHMOND	VIRGINIA	82	12-82 29,617	0	SB	45,373
5	R01 GM27250-27 21700	GLUECKSOHN-WAELSCH, SALOME GENETIC CONTROL OF MAMMALIAN DIFFERENTIATION	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	03-83 129,285	0	MGN	240,470
5	R01 GM27251-03 11940	MARIANO, PATRICK S SYNTHESIS OF N-ALLYLIMINIUM SALT-PHOTOCYCLIZATIONS	UNIVERSITY OF MARYLAND COLLEGE PK CAMPUS	COLLEGE PARK	MARYLAND	82	12-82 46,054	0	MCHA	65,397
5	R01 GM27253-03 21780	MURPHY, ELLEN SITE SPECIFIC RECOMBINATION IN STAPHYLOCOCCUS AUREUS	PUBLIC HLTH RES INST OF THE CITY OF NY	NEW YORK	NEW YORK	82	11-82 57,200	0	MBC	79,462
5	R01 GM27256-03 22400	LEVINE, LAWRENCE PROSTAGLANDIN BIOSYNTHESIS BY CELLS IN CULTURE	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	11-82 66,905	2	PC	108,045
5	R01 GM27259-03 11760	SAENGER, PAUL H NON-INVASIVE METHODS FOR STUDY OF DRUG METABOLISM	MONTEFIORE HOSPITAL AND MEDICAL CENTER	NEW YORK	NEW YORK	81	10-82 75,043	0	PHRA	86,418
5	R01 GM27260-03 22300	BAUMANN, GILBERT EXPERIMENTAL TESTING OF THE MODULAR CHANNEL CONCEPT	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	06-83 32,600	0	PHY	48,900
5	R01 GM27263-03 21320	NAKAMOTO, TOKUMASA SELECTION OF MRNA INITIATOR SITE IN BACTERIAL PROTEIN	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	11-82 68,285	0	MBC	107,207
5	R01 GM27268-03 21480	MORROW, KENNETH J, JR REGULATORY MUTATIONS AFFECTING HPRT SYNTHESIS	TEXAS TECH UNIVERSITY	LUBBOCK	TEXAS	82	11-82 21,464	0	MGN	27,903

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5 R01 GM27270-03 21800	GILLESPIE, DAVID H STRUCTURE AND FUNCTION OF REPEATED DNA IN PRIMATES	HAHNEMANN MED COL & HOSP OF PHILADELPHIA	PHILADELPHIA	PENNSYLVANIA	82	12-82	0	MGN	80,528	126,038
5 R01 GM27274-03 22550	PEARSON, ROBERT H SINGLE CRYSTAL MOLECULAR STRUCTURES OF LECITHIN	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	12-82	0	BBCB	35,900	53,591
5 R01 GM27276-03 22400	VAN WART, HAROLD E METALLOENZYME DYNAMICS AND MECHANISM	FLORIDA STATE UNIVERSITY	TALLAHASSEE	FLORIDA	82	12-82	0	BMT	33,600	48,552
5 R01 GM27278-03 22550	MC INTOSH, THOMAS J LIPID BILAYER STRUCTURE: EFFECT OF SMALL MOLECULES	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	06-83	0	BBCB	41,930	62,895
5 R01 GM27283-02 22300	ALLEN, RICHARD D CELLULAR MEMBRANE RECYCLING	UNIVERSITY OF HAWAII AT MANOA	HONOLULU	HAWAII	81	02-83	0	CBY	19,379	25,697
5 R01 GM27284-03 22250	ALLEN, ROBERT D CYTOPLASMIC RHEOLOGY OF MOTILE CELLS	DARTMOUTH COLLEGE	HANOVER	NEW HAMPSHIRE	82	08-83	0	CBY	57,645	84,566
5 R01 GM27288-03 22250	LA FOUNTAIN, JAMES R, JR THE KINETOCHORE: A MOLECULAR CYTOCHEMICAL APPROACH	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	82	12-82	0	CBY	39,185	58,028
5 R01 GM27291-03 21100	DOWNING, KENNETH H DNA STRUCTURE BY ELECTRON DIFFRACTION AND MICROSCOPY	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	03-83	0	MBY	33,603	48,052
5 R01 GM27292-03 22300	WALLACE, BONNIE A STRUCTURAL BASIS OF MEMBRANE PROTEIN FUNCTIONS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	11-82	1	BBCA	38,989	64,129
5 R01 GM27298-03 22300	SATIR, BIRGIT H GENETICS OF EXOCYTOSIS IN MORTAL/IMMORTAL PROTOZOA	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	01-83	0	CBY	60,000	110,740
5 R01 GM27303-03 22300	PALADE, GEORGE E MEMBRANE INTERACTIONS IN EUKARYOTIC CELLS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	11-82	2	MBY	76,314	119,126
5 R01 GM27304-03 21600	CHINAULT, ALAN C MOLECULAR ORGANIZATION OF YEAST CENTROMERIC REGIONS	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	05-83	0	MBY	57,027	77,557

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5	R01 GM27307-03 21750	ARTZ, STANLEY W GENE REGULATORY MECHANISMS IN AMINO ACID BIOSYNTHESIS	UNIVERSITY OF CALIFORNIA	DAVIS DAVIS	CALIFORNIA	82	11-82	0	MBC		70,457	92,299
5	R01 GM27308-04 22450	CHANCE, BRITTON MECHANISM OF ELECTRON TRANSFER REACTIONS IN MITOCHONDRIA	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	04-83	1	BBCB		96,074	154,343
5	R01 GM27309-04 22450	DUTTON, PETER L ELECTRON AND PROTON TRANSLOCATION IN ENERGY CONVERSION	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	04-83	1	BBCB		93,085	153,590
5	R01 GM27310-03 21700	DOTTIN, ROBERT P DEVELOPMENTAL CONTROL OF DICTYOSTELIUM GENE EXPRESSION	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	11-82	0	MBY		65,349	95,234
5	R01 GM27314-03 21280	SIMON, LEE D GENETIC CONTROL OF PROTEIN DEGRADATION	RUTGERS THE STATE UNIV	NEW BRUNSWICK NEW BRUNSWICK	NEW JERSEY	82	11-82	1	GEN		65,696	103,800
5	R01 GM27318-03 21750	HIRSH, JAY REGULATION OF THE DOPA DECARBOXYLASE GENE	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	12-82	0	MBY		46,624	89,374
5	R01 GM27319-06 11920	CASERIO, MARJORIE C ALKYLATION OF DISULFIDES--THIOSULFONIUM IONS	UNIVERSITY OF CALIFORNIA	IRVINE IRVINE	CALIFORNIA	82	07-83	0	MCHA		32,611	45,492
5	R01 GM27320-23 11910	DAUBEN, WILLIAM G MODIFIED STEROID AND POLYTERPENOID ANTITUMOR AGENTS	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	11-82	2	MCHA		57,879	75,006
5	R01 GM27322-04 21750	WEINBERG, ERIC S HISTONE GENES AND THEIR TRANSCRIPTION	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	06-83	3	MBY		96,268	156,567
5	R01 GM27324-03 22250	PORTER, KEITH R CYTOPLASMIC GROUND SUBSTANCE: FORM, FUNCTION, RESPONSE	UNIVERSITY OF COLORADO AT BOULDER	BOULDER BOULDER	COLORADO	82	02-83	0	CBY		78,620	109,675
5	R01 GM27328-03 11910	GODLESKI, STEPHEN A SYNTHESIS OF SPIROCYCLIC NATURAL PRODUCTS	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	11-82	0	BMT		34,997	60,895
5	R01 GM27340-03 13200	STILLER, RICHARD L CARDIOVASCULAR DYNAMICS AND ANESTHETIC DISPOSITION	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANI	81	11-82	0	SGYA		76,227	104,428

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5	P50 GM27345-03	HUNT, THOMAS K	UNIVERSITY OF CALIFORNIA	SAN FRANCISCO		82	12-82	0	SRC	
*	13300	A STUDY OF WOUND HEALING AND WOUND INFECTION		SAN FRANCISCO	CALIFORNIA		295,406			386,125
5	R01 GM27350-03	LOVE, L J CLINE	SETON HALL UNIVERSITY			82	08-83	0	BBCA	
	22500	CHARGE TRANSFER COMPLEXES IN INVERTED MICELLES		SOUTH ORANGE	NEW JERSEY		8,844			13,116
5	R01 GM27353-03	GRUENER, RAPHAEL P	UNIVERSITY OF ARIZONA			82	05-83	0	SAT	
	13200	ANESTHETIC ACTION ON NORMAL AND HYPERTHERMIA MUSCLES		TUCSON	ARIZONA		24,087			34,444
5	R01 GM27355-03	SUKENIK, CHAIM N	CASE WESTERN RESERVE UNIVERSITY			82	05-83	0	MCHA	
	11920	AQUEOUS MICELLE MEDIATED CHEMICAL SELECTIVITY		CLEVELAND	OHIO		49,400			74,594
5	R01 GM27357-03	PRASAD, PARAS N	STATE UNIVERSITY OF NEW YORK AT BUFFALO			82	12-82	0	BBCA	
	22500	REACTION DYNAMICS OF SOLIDS OF BIOLOGICAL INTEREST		BUFFALO	NEW YORK		29,220			43,469
5	R01 GM27358-02	DEUTSCH, WALTER A	LOUISIANA STATE UNIV A&M COL BATON ROUGE			82	01-83	1	BIO	
	21250	ALKYLATION DAMAGE AND ITS REPAIR IN DROSOPHILA		BATON ROUGE	LOUISIANA		35,659			44,074
5	R01 GM27364-02	FORSYTH, JAMES M	UNIVERSITY OF ROCHESTER			81	01-83	0	SSS	
	12840	INSTRUMENTATION FOR FAST BIOSTRUCTURAL KINETIC STUDIES		ROCHESTER	NEW YORK		90,461			134,898
5	R01 GM27365-03	WU, RAY	CORNELL UNIVERSITY ITHACA			82	11-82	0	PC	
	21320	FUNCTION OF INTERVENING SEQUENCE IN YEAST TRNA GENE		ITHACA	NEW YORK		54,218			86,666
5	R01 GM27367-03	COHEN, FREDRIC S	RUSH UNIVERSITY			82	03-83	0	BBCB	
	22300	FUSION OF PHOSPHOLIPID VESICLES WITH PLANAR MEMBRANES		CHICAGO	ILLINOIS		37,553			62,186
5	R01 GM27378-03	ROBISON, GEORGE A	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON			82	11-82	0	PHRA	
	11870	HORMONAL & NON-HORMONAL REGULATION OF ADENYLYL CYCLASE		HOUSTON	TEXAS		68,638			94,720
5	R01 GM27382-03	SWEENEY, WILLIAM V	HUNTER COLLEGE			82	11-82	0	BMT	
	22450	IRON-SULFUR PROTEINS		NEW YORK	NEW YORK		30,636			49,600
5	P41 GM27405-03	KAPLAN, JOHN E	ALBANY MEDICAL COLLEGE			81	01-83	0	555	
	12900	SCINTIGRAPHIC EVALUATION OF PHYSIOLOGICAL EVENTS		ALBANY	NEW YORK		15,000			22,200

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5	P41 GM27408-03 12900	KAHAN, LAWRENCE CELL SORTING CORE FACILITY	UNIVERSITY OF WISCONSIN	MADISON MADISON	WISCONSIN	81	08-83 15,000	0	SSS	21,450
5	P41 GM27431-03 12900	HORTON, DEREK NMR SPECTROMETER FOR CORE USER GROUP	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	81	12-82 13,555	0	SSS	18,570
5	P41 GM27433-03 12900	KRAUS, GEORGE A NIGMS SHARED INSTRUMENTATION PROGRAM--200 MHZ NMR	IOWA STATE UNIVERSITY OF SCIENCE & TECH	AMES	IOWA	81	08-83 22,171	0	SSS	26,505
5	R01 GM27472-03 22300	HEDGPETH, JOE PROTEIN SECRETION STUDIES WITH PLASMID-CLONED GENES	UNIVERSITY OF CALIFORNIA	SAN FRANCISCO SAN FRANCISCO	CALIFORNIA	82	12-82 44,322	0	MBC	57,752
5	R01 GM27493-04 22400	CHLEBOWSKI, JAN ASSEMBLY, ACTIVATION AND REGULATION OF ENZYMES	VIRGINIA COMMONWEALTH UNIVERSITY	RICHMOND	VIRGINIA	82	05-83 40,614	1	BBCA	59,986
5	R01 GM27498-03 22450	VAN DUYNE, RICHARD P A NEW PROBE TECHNIQUE FOR THE STUDY OF PHOTOSYNTHESIS	NORTHWESTERN UNIVERSITY	EVANSTON	ILLINOIS	82	11-82 51,946	0	BMT	61,952
5	R01 GM27509-03 22300	GORDON, JULIUS A LECTINS, MEMBRANE BINDING AND BIOLOGIC REGULATION	UNIVERSITY OF COLORADO HLTH SCIENCES CTR	DENVER	COLORADO	82	08-83 33,260	0	CBY	42,240
5	R01 GM27510-03 22250	SPUDICH, JAMES A ACTIN ASSEMBLY BEFORE AND AFTER FERTILIZATION	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	11-82 65,868	0	CBY	104,071
5	P41 GM27543-02 12900	MAGUIRE, MICHAEL APPLICATION FOR AN ELECTRON MICROSCOPE	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	82	11-82 10,870	1	SSS	16,414
5	P41 GM27558-03 12900	WILLIAMS, CHARLES H, JR SHARED FACILITY FOR PROTEIN SEQUENCING	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	12-82 10,752	0	SSS	14,225
5	R01 GM27589-02 22100	CHAN, TEH-SHENG MOLECULAR PATHOLOGY OF INHERITED IMMUNODEFICIENCY	UNIVERSITY OF TEXAS MED BR GALVESTON	GALVESTON	TEXAS	82	01-83 46,818	1	PTHA	63,204
5	R01 GM27590-03 11860	POWIS, GARTH ROLE OF CYTOCHROME P-450 IN DRUG REDUCTION	MAYO FOUNDATION	ROCHESTER	MINNESOTA	82	11-82 82,441	0	PHRA	106,705

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5	R01 GM27592-03 22300	KELLY, DOUGLAS E FREEZE-FRACTURE OF DESMOSOMAL AND TRIADIC JUNCTIONS	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	08-83	0	MBY		48,901	74,819
5	R01 GM27593-02 21750	BEAUDET, ARTHUR L REGULATION OF ARGININOSUCCINATE SYNTHETASE	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	03-83	1	MGN		77,561	105,123
2	R01 GM27597-04 21280	MARTIN, NANCY C TRANSCRIPTION AND ORGANIZATION OF MITOCHONDRIAL GENES	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	05-83	4	GEN		89,365	118,409
5	R01 GM27608-14 21200	ENGLUND, PAUL T STRUCTURE AND SYNTHESIS OF DNA	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	12-82	2	BIO		108,084	162,126
5	R01 GM27610-03 11920	SCHWAB, JOHN M STEREOCHEMISTRY OF ENZYMATIC RING CLEAVAGE REACTIONS	CATHOLIC UNIVERSITY OF AMERICA	WASHINGTON	DIST OF COL	82	11-82	0	MCHA		47,709	72,518
2	R01 GM27611-04 21600	STORTI, ROBERT V EXPRESSION AND ISOLATION OF DROSOPHILA MUSCLE GENES	UNIVERSITY OF ILLINOIS MEDICAL CENTER	CHICAGO	ILLINOIS	82	07-83	2	GEN		71,700	113,286
5	R01 GM27612-07 22300	SONENBERG, MARTIN ION TRANSPORT IN HORMONAL RESPONSIVENESS	SLOAN-KETTERING INSTITUTE FOR CANCER RES	NEW YORK	NEW YORK	81	06-83	0	SSS		74,042	109,582
5	R01 GM27617-03 11910	ANDERSON, JOHN A CYTOCHROME P-450 IN ERGOT ALKALOID BIOSYNTHESIS	TEXAS TECH UNIVERSITY	LUBBOCK	TEXAS	82	03-83	0	BIO		31,925	40,545
5	R01 GM27620-03 11930	SCHWEIZER, EDWARD E MULTI RING PYRAZOLOHETEROCYCLES FROM ALLENYL AZINES	UNIVERSITY OF DELAWARE	NEWARK	DELAWARE	82	05-83	1	MCHA		37,179	54,874
5	R01 GM27622-03 21320	CHAMPNEY, WILLIAM S PROTEIN SYNTHESIS MUTANTS OF E COLI	UNIVERSITY OF TEXAS SAN ANTONIO	SAN ANTONIO	TEXAS	81	06-83	0	MBC		47,668	65,586
2	R01 GM27623-03A1 21600	LOHR, DENNIS E PHASING AND REPEATS IN ACTIVELY TRANSCRIBED CHROMATIN	ARIZONA STATE UNIVERSITY	TEMPE	ARIZONA	82	06-83	2	GEN		50,467	72,354
5	R01 GM27624-03 21320	HAWTHORNE, DONALD C SUPPRESSOR GENES AND INTERSPECIFIC HYBRIDS OF YEAST	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	07-83	0	GEN		48,640	65,178

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5 R01 GM27629-03 22200	TYSON, JOHN J CONTROL OF NUCLEAR DIVISION IN PHYSARUM POLYCEPHALUM	VIRGINIA POLYTECHNIC INST AND ST UNIV	BLACKSBURG	VIRGINIA	82	03-83	1	CBY	30,269	43,285
5 R01 GM27632-03 22300	BARKER, ROBERT MEMBRANE OLIGOSACCHARIDES AND MONOSACCHARIDE METABOLISM	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	01-83	2	PC	48,381	69,503
5 R01 GM27633-04 12990	WARE, BENNIE R AUTOMATED ELECTROPHORETIC ANALYSIS OF LIVING CELLS	SYRACUSE UNIVERSITY AT SYRACUSE	SYRACUSE	NEW YORK	82	08-83	1	BBCA	61,525	95,005
5 R01 GM27636-03 22400	SELTZER, STANLEY MECHANISM STUDIES OF ENZYMIC CIS-TRANS ISOMERIZATION	ASSOCIATED UNIV-BROOKHAVEN NATL LAB	UPTON	NEW YORK	82	09-83	0	BIO	36,815	58,904
5 R01 GM27639-03 22400	CHURCHICH, JORGE E BRAIN PYRIDOXAL KINASE AND P-PYRIDOXINE OXIDASE	UNIVERSITY OF TENNESSEE KNOXVILLE	KNOXVILLE	TENNESSEE	82	06-83	0	PB	32,938	50,606
5 P01 GM27643-03 21780	BUKHARI, AHMAD I MOVABLE GENETIC ELEMENTS	COLD SPRING HARBOR LABORATORY	COLD SPRING HARB	NEW YORK	82	05-83	0	SSS	500,317	891,065
5 R01 GM27645-04 22550	MC PHERSON, ALEXANDER X-RAY DIFFRACTION ANALYSIS OF DNA BINDING PROTEINS	UNIVERSITY OF CALIFORNIA RIVERSIDE	RIVERSIDE	CALIFORNIA	82	08-83	3	BBCB	74,810	101,811
5 R01 GM27647-03 11910	HART, DAVID J SYNTHESIS OF BIOLOGICALLY ACTIVE ALKALOIDS	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	82	03-83	0	MCHA	45,989	61,895
5 R01 GM27651-03 21100	VAUGHAN, WORTH E ION AND POLYION DYNAMICS IN DNA SOLUTIONS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	02-83	0	BBCA	23,589	30,751
2 R01 GM27652-04 21700	PALATNIK, CARL M DEVELOPMENTALLY REGULATED MRNAS IN DICTYOSTELIUM	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	06-83	2	CTY	95,392	133,267
5 R01 GM27656-03 22300	MACDONALD, RUSSELL E COUPLING OF ENERGY TO THE TRANSPORT OF IONS & MOLECULES	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	08-83	0	BIO	68,197	100,080
5 R01 GM27659-03 22400	DOOLEY, DAVID M AMINE OXIDASES:ACTIVE SITE STRUCTURE AND ROLE OF CU(II)	AMHERST COLLEGE	AMHERST	MASSACHUSETTS	82	06-83	0	PB	35,988	49,808

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5	R01 GM27664-03 21750	MORGAN, EDWARD A NEW APPROACHES TO ASPECTS OF TRNA AND RRNA IN E COLI	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	82	05-83	0	MBC	41,058	59,118
2	R01 GM27665-04 12840	HYDE, JAMES S DEVELOPMENT OF BIOMEDICAL ESR INSTRUMENTATION	MEDICAL COLLEGE OF WISCONSIN	MILWAUKEE	WISCONSIN	82	06-83	2	BBCB	204,911	269,735
5	R01 GM27667-03 22400	ABELES, ROBERT H HMG-COA REDUCTASE--INHIBITION AND ACTION	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	05-83	0	BIO	87,850	122,231
5	R01 GM27670-03 13200	UEDA, ISSAKU AROMATIC AMINE LOCAL ANESTHETICS AND MEMBRANES	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	03-83	0	SAT	37,725	54,701
5	R01 GM27673-03 13410	COOK, JAMES A ROLE OF THROMBOXANE AND PROSTAGLANDINS IN SHOCK	MEDICAL UNIVERSITY OF SOUTH CAROLINA	CHARLESTON	SOUTH CAROLINA	82	03-83	0	SAT	41,258	54,048
1	R01 GM27675-01A1 AM 11760	STEGGLES, ALAN W THE REGULATION OF CYTOCHROME P-450-LM2 MRNA SYNTHESIS	NORTHEASTERN OHIO UNIVERSITIES COLL MED	ROOTSTOWN	OHIO	82	01-83	2	BIO	40,400	58,100
5	R01 GM27678-03 13200	FINK, B RAYMOND HYPOOSMOTIC LOCAL ANESTHESIA: MECHANISMS AND TOXICITY	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	03-83	0	SAT	95,503	127,370
5	R01 GM27681-03 21100	DERVAN, PETER B MOLECULAR RECOGNITION OF DNA & RNA BY POLYINTERCALATORS	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	03-83	0	BBCA	49,729	69,265
5	R01 GM27682-03 22550	ARGOS, PATRICK COMPARISON AND PREDICTION OF PROTEIN STRUCTURE	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	07-83	0	BBCB	27,254	38,156
5	R01 GM27690-03 22300	STRAUSS, HERBERT L VIBRATIONAL STUDIES OF LIPID STRUCTURE AND DYNAMICS	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	03-83	0	BBCB	56,283	73,731
5	R01 GM27692-02 21320	LOCKARD, RAYMOND E MESSENGER RNA STRUCTURE IN TRANSLATIONAL CONTROL	GEORGE WASHINGTON UNIVERSITY	WASHINGTON	DIST OF COL	82	11-82	1	CTY	58,709	90,388
5	R01 GM27694-03 11920	BAUMGARTEN, HENRY E CHEMICAL AND ELECTROCHEMICAL OXIDATION STUDIES	UNIVERSITY OF NEBRASKA LINCOLN	LINCOLN	NEBRASKA	82	05-83	2	MCHA	54,577	75,316

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5	R01 GM27695-03 22400	FLEMING, PATRICK J ELECTRON TRANSPORT ENZYMES IN CATECHOLAMINE GRANULES	GEORGETOWN UNIVERSITY	WASHINGTON	DIST OF COL	82	03-83	0	BIO		39,626	54,582
5	R01 GM27700-02 22400	AXELROD, BERNARD IDENTIFICATION OF PHOSPHATE-BINDING SITES IN PROTEINS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	81	09-82	0	BIO		53,947	81,724
5	R01 GM27701-03 21200	CHIRIKJIAN, JACK G SITE SPECIFIC ENDONUCLEASE CATALYSIS OF DNA	GEORGETOWN UNIVERSITY	WASHINGTON	DIST OF COL	82	03-83	2	BIO		44,471	63,207
5	R01 GM27703-03 21700	ALLEN, SALLY L NUCLEAR DIFFERENTIATION IN TETRAHYMENA	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	03-83	0	GEN		66,497	105,065
5	R01 GM27707-03 21320	DANIEL, WILLIAM L GENETIC ANALYSIS OF ARYLSULFATASE B VARIATION	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	03-83	0	MGN		20,151	28,695
5	R01 GM27711-03 21320	GOLDMAN, EMANUEL ANALYSIS OF TRNA CODING BY PROTEIN SYNTHESIS IN VITRO	UNIVERSITY OF MEDICINE & DENTISTRY OF NJ	NEWARK	NEW JERSEY	82	03-83	0	MBC		50,525	84,648
5	R01 GM27712-03 21700	KABACK, DAVID B TRANSCRIPTION DURING MEIOSIS AND SPORULATION IN YEAST	UNIVERSITY OF MEDICINE & DENTISTRY OF NJ	NEWARK	NEW JERSEY	82	03-83	0	GEN		68,024	113,515
5	R01 GM27718-03 11760	KEMPER, BYRON W STRUCTURE AND FUNCTION OF CYTOCHROME P-450 GENES	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	04-83	0	MBY		37,342	55,876
5	R01 GM27719-03 21600	STEIN, ARNOLD CHROMATIN ASSEMBLY AND DISASSEMBLY BY PROTEINS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	04-83	0	MBY		67,136	92,190
5	R01 GM27720-03 21310	SOLLNER-WEBB, BARBARA T TRANSCRIPTION OF XENOPUS RIBOSOMAL DNA	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	03-83	0	MBY		42,368	63,552
5	R01 GM27721-02 22500	AMMA, ELMER L 113CD NMR AND CRYSTALLOGRAPHY OF ZN2+, CA2+ ENZYMES	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA	COLUMBIA	SOUTH CAROLINA	82	01-83	1	BMT		41,320	52,606
5	R01 GM27723-03 11760	BRUNENGRABER, HENRI CONTINUOUS MS MONITORING OF LIVER ALCOHOL METABOLISM	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	03-83	0	555		46,457	72,723

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5	R01 GM27727-03 21200	IHLER, GARRET M MECHANISM OF DNA REPLICATION OF PHAGE LAMBDA	TEXAS AGRI AND MECH UNIV	COLLEGE STATION COLLEGE STATION	TEXAS	82	03-83	0	MBC		33,196	42,823
5	R01 GM27731-03 21200	LIU, LEROY F FUNCTIONAL AND MECHANISTIC STUDIES OF DNA TOPOISOMERASES	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	03-83	0	MBC		44,652	66,978
5	R01 GM27733-02 22300	DE HARVEN, ETIENNE GM1 IN MYOBLAST DIFFERENTIATION AND TRANSFORMATION	SLOAN-KETTERING INSTITUTE FOR CANCER RES	NEW YORK	NEW YORK	82	11-82	0	CBY		15,723	23,902
5	R01 GM27736-03 21600	LEVY, BEATRIZ W NUCLEOSOME STRUCTURE AND FUNCTION	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	02-83	0	CTY		52,336	67,940
5	R01 GM27738-03 22500	BOXER, STEVEN G BIOMOLECULAR STRUCTURE/DYNAMICS--NUCLEAR POLARIZATION	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	07-83	0	BBCA		36,116	57,063
5	R01 GM27739-03 13700	MISELIS, RICHARD R BEHAVIORAL NEURAL SUBSTRATE MEDIATING WATER BALANCE	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	08-83	0	BPO		32,067	52,911
5	R01 GM27742-03 22400	BREWER, JOHN M MECHANISM OF METAL ACTIVATION OF YEAST ENOLASE	UNIVERSITY OF GEORGIA	ATHENS	GEORGIA	82	03-83	0	BIO		43,264	59,235
5	R01 GM27743-03 11920	BARTMESS, JOHN E HYDROGEN BONDING STRENGTHS OF SINGLE MOLECULES TO ANIONS	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	82	03-83	0	BBCA		20,451	27,953
5	R01 GM27744-03 22300	BROWN, ELLEN B POLAR HEAD GROUP INTERACTIONS AND LIPID PROPERTIES	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	82	04-83	0	BBCB		22,800	32,423
5	R01 GM27746-03 22400	KUNG, SHAIN-DOW RIBULASE-1,5 BISPHOSPHATE CARBOXYLASE IN VIVO	UNIVERSITY OF MARYLAND BALT CO CAMPUS	CATONSVILLE	MARYLAND	82	03-83	0	BIO		36,577	56,430
5	R01 GM27750-03 22450	SPUDICH, JOHN L FUNCTION OF BACTERIORHODOPSIN IN SENSORY TRANSDUCTION	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	03-83	0	MBC		46,072	84,404
5	R01 GM27753-03 22300	CABANTCHIK, Z IOAV ANION TRANSPORT: MOLECULAR DISSECTION OF PROCESSES	HEBREW UNIVERSITY OF JERUSALEM	JERUSALEM	ISRAEL	82	04-83	0	BBCA		42,088	42,088

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5	R01 GM27754-03 21750	WAHL, GEOFFREY M DRUG RESISTANCE AND GENE AMPLIFICATION IN EUKARYOTES	SALK INSTITUTE FOR BIOLOGICAL STUDIES	LA JOLLA	CALIFORNIA	82	03-83	75,412	0	MGN 122,167
5	R01 GM27755-03 12910	RILEY, WARD A, JR OPTICAL DIFFRACTION ANALYSIS OF PULSED ULTRASOUND	WAKE FOREST UNIVERSITY	WINSTON-SALEM	NORTH CAROLINA	82	06-83	55,620	0	RHM 74,586
5	R01 GM27756-03 22300	EISENBERG, MOISES VOLTAGE GATED PORES IN MEMBRANES: ALAMETHICIN	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	03-83	32,411	0	BBCB 48,272
5	R01 GM27757-03 21320	JACOBSON, ALLAN S MESSENGER RNA METABOLISM IN DICTYOSTELIUM DISCOIDEUM	UNIVERSITY OF MASSACHUSETTS MEDICAL SCH	WORCESTER	MASSACHUSETTS	82	03-83	74,304	2	MBY 125,267
5	R01 GM27758-03 12930	BEER, MICHAEL ELECTRON MICROSCOPIC STUDIES OF COLLAGEN	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	03-83	43,941	0	MBY 65,912
5	R01 GM27763-03 12930	BECKER, ROBERT P BIOMEDICAL APPLICATIONS OF BACKSCATTERED IMAGING	UNIVERSITY OF ILLINOIS MEDICAL CENTER	CHICAGO	ILLINOIS	82	03-83	27,409	0	CBY 43,032
5	R01 GM27764-03 22300	UNWIN, PETER N STRUCTURE OF MOLECULAR ASSEMBLIES INVOLVING MEMBRANES	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	03-83	85,683	2	MBY 134,219
5	R01 GM27765-03 21310	AEBI, UELI STRUCTURAL STUDIES OF RNA POLYMERASE FROM E. COLI	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	03-83	56,475	0	MBY 82,513
5	R01 GM27766-03 22400	O'CONNOR, MARY L A STUDY OF THE REGULATION OF METHANE OXIDATION	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	03-83	36,284	0	MBC 48,279
5	R01 GM27767-03 21100	LIM, EDWARD C ELECTRONIC RELAXATION OF DNA BASES	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	82	03-83	34,704	0	BBCA 50,394
5	R01 GM27774-03 21600	ROBBERSON, DONALD L SEQUENCE SPECIFIC DNA-PROTEIN INTERACTION	UNIVERSITY OF TEXAS SYSTEM CANCER CENTER	HOUSTON	TEXAS	82	03-83	12,286	0	MBC 17,016
5	R01 GM27780-03 11760	MANNERING, GILBERT J FUNCTIONS OF P-450-LINKED DRUG-METABOLIZING SYSTEMS	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	08-83	118,471	0	PHRA 164,675

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5	R01 GM27784-02 22400	GRANT, GREGORY A STRUCTURE AND FUNCTION IN ALLOSTERIC REGULATION	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	01-83	1	PC		45,032	69,800
5	R01 GM27785-03 21310	HODO, HENRY G, III RNA POLYMERASE 2--STRUCTURE & CHEMICAL MODIFICATION	MEHARRY MEDICAL COLLEGE	NASHVILLE	TENNESSEE	82	07-83	0	BIO		38,356	49,728
5	R01 GM27787-02 21100	FRIEDMAN, STANLEY THE EFFECT OF 5-AZACYTIDINE ON THE METHYLATION OF DNA	DOWNSTATE MEDICAL CENTER	NEW YORK	NEW YORK	81	03-83	0	MBC		42,239	60,312
5	R01 GM27789-03 21750	MARZLUFF, WILLIAM F, JR TRANSCRIPTION OF LMW NUCLEAR RNA GENES IN DEVELOPMENT	FLORIDA STATE UNIVERSITY	TALLAHASSEE	FLORIDA	82	06-83	0	MBY		64,320	92,497
5	R01 GM27790-03 21750	MATHEWS, MICHAEL B INDUCTION AND REPRESSION BY AMINO ACID ANALOGUES	COLD SPRING HARBOR LABORATORY	COLD SPRING HARB	NEW YORK	82	03-83	0	MBY		51,133	91,068
5	R23 GM27791-03 13250	WASKELL, LUCY A METABOLISM OF INHALATION ANESTHETICS	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	08-83	0	SAT		30,256	36,417
5	R01 GM27792-02 21320	CHATTERJEE, NANDO K NUCLEAR PROTEIN SYNTHESIS IN EUKARYOTIC CELLS	NEW YORK STATE DEPARTMENT OF HEALTH	ALBANY	NEW YORK	82	03-83	1	BIO		49,924	72,440
5	R01 GM27795-03 21280	LOCKER, JOSEPH ANALYSIS OF MTRNA AND ITS PROCESSING IN YEAST	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	04-83	0	MBY		53,610	82,805
5	R01 GM27800-03 11770	BOURNE, HENRY R MOLECULAR BASIS OF RECEPTOR-CYCLASE COUPLING	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	05-83	2	PC		165,190	216,027
5	R01 GM27801-02 11780	LINSCHEER, WILLEM G PROTECTION OF PROPYLTHIOURACIL AGAINST TOXIC HEPATITIS	UPSTATE MEDICAL CENTER	SYRACUSE	NEW YORK	82	12-82	1	PHRA		86,782	103,201
5	R01 GM27802-03 11850	SCHOTT, HANS EFFECT OF ELECTROLYTES ON NONIONIC SURFACTANTS	TEMPLE UNIVERSITY	PHILADELPHIA	PENNSYLVANIA	82	05-83	0	PHRA		25,835	39,528
1	R01 GM27804-01A2 22300	BEALL, HIE PING FAST TRANSPORT KINETICS & ULTRASTRUCTURE OF THE NA+ PUMP	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	04-83	2	PB		68,116	101,174

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5	R01 GM27811-03 11880	VAN DER HOEVEN, THEODORE A ENDOCRINE CONTROL OF LIVER MICROSOMAL CYTOCHROME P-450	ALBANY MEDICAL COLLEGE	ALBANY	NEW YORK	82	08-83	0	BIO		34,544	54,220
5	R01 GM27812-03 22450	HATEFI, YOUSSEF MITOCHONDRIAL NADH AND SUCCINATE DEHYDROGENASE	SCRIPPS CLINIC AND RESEARCH FOUNDATION	LA JOLLA	CALIFORNIA	82	03-83	0	BIO		44,351	71,277
5	R01 GM27813-03 21600	DUNCAN, BRUCE K ENZYMES AND MUTANTS OF DNA METABOLISM	INSTITUTE FOR CANCER RESEARCH	PHILADELPHIA	PENNSYLVANIA	82	03-83	0	MBC		37,030	53,710
5	R01 GM27814-02 22400	DE TAR, DELOS F QUANTITATIVE PREDICTION OF PROTEIN INTERACTIONS	FLORIDA STATE UNIVERSITY	TALLAHASSEE	FLORIDA	82	01-83	0	BBCB		32,952	47,304
5	R01 GM27815-03 21320	HECHT, SIDNEY M NUCLEOTIDE REPLACEMENTS IN TRANSFER RNA	UNIVERSITY OF VIRGINIA	CHARLOTTESVILLE	VIRGINIA	82	03-83	0	PC		50,742	73,576
2	R01 GM27817-03 21250	LE CLERC, JOSEPH E MECHANISMS OF MUTAGENESIS DURING DNA REPLICATION	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	03-83	2	MG		50,440	82,446
5	R01 GM27819-02 21250	PERSON, STANLEY IN VITRO MUTAGENESIS OF DNA	PENNSYLVANIA STATE UNIVERSITY	UNIV PARK UNIVERSITY PARK	PENNSYLVANIA	82	12-82	1	MG		58,947	79,268
5	R01 GM27820-03 11770	HARDEN, T KENDALL SYNTHESIS OF BETA-ADRENERGIC RECEPTORS	UNIVERSITY OF NORTH CAROLINA	CHAPEL HILL CHAPEL HILL	NORTH CAROLINA	82	03-83	2	PHRA		74,693	104,271
5	R01 GM27825-03 22500	FLEMING, GRAHAM R TIME RESOLVED STUDIES OF PROTEIN DYNAMICS	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	03-83	0	BBCA		46,455	72,934
5	R01 GM27836-03 11760	NOVAK, RAYMOND F MOLECULAR BASIS OF P450LM SUBSTRATE SPECIFICITY	NORTHWESTERN UNIVERSITY	CHICAGO	ILLINOIS	82	03-83	0	BIO		52,544	69,281
2	R01 GM27838-04 22550	MC PHERSON, ALEXANDER X-RAY CRYSTALLOGRAPHIC ANALYSES OF PROTEIN STRUCTURES	UNIVERSITY OF CALIFORNIA	RIVERSIDE RIVERSIDE	CALIFORNIA	82	06-83	4	BBCB		58,450	79,675
5	R01 GM27839-03 21250	CHAE, CHI-BOM GLOBIN GENE BINDING NONHISTONE PROTEINS	UNIVERSITY OF NORTH CAROLINA	CHAPEL HILL CHAPEL HILL	NORTH CAROLINA	82	03-83	0	MBY		47,122	65,386

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5	R01 GM27840-03 22400	OGILVIE, JAMES W PHOSPHOFRUCTOKINASE: STRUCTURE-FUNCTION RELATIONSHIPS	UNIVERSITY OF VIRGINIA	CHARLOTTESVILLE	VIRGINIA	82	09-83	0	BIO		30,867	44,757
5	R01 GM27851-03 22300	ORR, GEORGE A SELECTIVE RETRIEVAL OF LABELED MEMBRANE COMPONENTS	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	03-83	0	CBY		68,193	125,635
5	R01 GM27857-03 22450	GUILLORY, RICHARD J MEMBRANE LINKED REACTIONS: COUPLING FACTOR ATPASE	UNIVERSITY OF HAWAII AT MANOA	HONOLULU	HAWAII	82	03-83	1	BIO		47,364	65,510
5	P01 GM27859-03 22300	SATIR, PETER MEMBRANE-CYTOSKELETAL RELATIONSHIPS	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	04-83	0	SSS		182,948	336,293
5	R01 GM27860-04 21280	MATTOON, JAMES R GENETIC MODIFICATION OF MITOCHONDRIA	UNIVERSITY OF COLORADO AT COLORADO SPGS	COLORADO SPRINGS	COLORADO	82	08-83	2	PB		69,883	103,926
5	R01 GM27861-14 21750	LANDY, ARTHUR CONTROL OF SYNTHESIS AND FUNCTION OF NUCLEIC ACID	BROWN UNIVERSITY	PROVIDENCE	RHODE ISLAND	82	05-83	2	MBC		81,602	126,690
5	R01 GM27862-03 21200	SZOSTAK, JACK W MECHANISMS OF SEQUENCE RECTIFICATION IN YEAST RDNA	SIDNEY FARBER CANCER INSTITUTE	BOSTON	MASSACHUSETTS	82	03-83	0	GEN		48,516	82,197
5	R01 GM27863-03 21600	PUKKILA, PATRICIA J MEIOSIS AND GENETIC RECOMBINATION IN COPRINUS CINEREUS	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	03-83	0	GEN		46,805	64,706
5	R01 GM27864-03 21700	KARRER, KATHLEEN M GERM LINE SPECIFIC DNA SEQUENCES IN TETRAHYMENA	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	03-83	0	GEN		44,072	71,397
5	R01 GM27866-03 21700	COURTRIGHT, JAMES B GENETIC REGULATION OF TISSUE-SPECIFIC GENE EXPRESSION	MARQUETTE UNIVERSITY	MILWAUKEE	WISCONSIN	82	08-83	0	GEN		35,970	47,319
5	R01 GM27870-03 21750	CRAIG, ELIZABETH A CHARACTERIZATION OF TRANSCRIPTIONALLY REGULATED GENES	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	03-83	0	GEN		56,164	79,025
5	R01 GM27871-03 21480	BRUNS, PETER J THE GENETIC ORGANIZATION OF TETRAHYMENA	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	03-83	2	GEN		63,072	94,951

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5	R01 GM27875-03 21700	SPRADLING, ALLAN C NORMAL AND MUTANT CHORION GENES OF DROSOPHILA	CARNEGIE INSTITUTION OF WASHINGTON D C	BALTIMORE	MARYLAND	82	03-83	0	GEN		60,847	91,283
5	R01 GM27882-03 21480	HOUSMAN, DAVID E GENETIC STRUCTURE AND FUNCTION OF HUMAN CHROMOSOME II	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	03-83	0	MGN		51,629	81,909
5	R01 GM27887-03 22400	DE MOSS, JOHN A SUBUNIT/DOMAIN INTERACTIONS IN MULTIFUNCTIONAL ENZYMES	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	04-83	0	GEN		73,963	101,214
5	R01 GM27889-03 21750	OLSON, MAYNARD V YEAST TRNA GENES	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	03-83	0	GEN		47,229	73,205
5	R01 GM27892-03 22200	HANNA, MICHAEL H ESTABLISHMENT OF MULTICELLULARITY IN P. VIOLACEUM	RENSSELAER POLYTECHNIC INSTITUTE	TROY	NEW YORK	82	03-83	0	CBY		29,221	46,754
5	R01 GM27894-03 22250	SOLOMON, FRANK E CYTOPLASMIC DETERMINATION OF DETAILED CELL MORPHOLOGY	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	03-83	0	CBY		62,192	101,379
5	R01 GM27896-03 21750	LIEBKE, E HOPE REGULATION OF RRN OPERON EXPRESSION: MUTANT ANALYSIS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	07-83	0	MBC		34,654	57,770
5	R01 GM27900-03 21100	SAKAI, TED T SYNTHESIS AND PROPERTIES OF BLEOMYCIN ANALOGS	UNIVERSITY OF ALABAMA IN BIRMINGHAM	BIRMINGHAM	ALABAMA	82	02-83	0	MCHA		48,353	65,663
5	R01 GM27903-03 22250	TAMM, SIDNEY L CELL MOTILITY, MEMBRANE FLUIDITY AND MECHANOTRANSDUCTION	BOSTON UNIVERSITY	BOSTON	MASSACHUSETTS	82	04-83	2	CBY		81,613	106,468
5	R01 GM27904-03 22410	PAULSON, JAMES C MAMMALIAN SIALYLTRANSFERASES	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	03-83	0	PC		49,308	64,593
5	R01 GM27906-03 22300	THOMAS, DAVID D BIOPHYSICAL STUDIES OF MEMBRANE MOLECULAR DYNAMICS	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	03-83	0	BBCB		40,931	54,298
5	R01 GM27907-03 22550	RUBIN, BYRON H STRUCTURE STUDIES OF PROTEINS GLYCOPROTEINS AND ENZYMES	EMORY UNIVERSITY	ATLANTA	GEORGIA	82	04-83	0	BBCB		30,280	45,420

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5	R01 GM27914-03 22300	COSTELLO, MARTIN J, III COMBINED X-RAY/EM ANALYSIS OF INTRAMEMBRANE PARTICLES	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	06-83	0	BBCB		42,234	62,824
5	R01 GM27915-03 21800	YARDLEY, DARRELL G THE AMYLASE SYSTEM OF DROSOPHILA PSEUDOOBSCURA	CLEMSON UNIVERSITY	CLEMSON	SOUTH CAROLINA	82	03-83	0	GEN		31,503	47,570
5	R01 GM27916-02 21600	ROTHSTEIN, RODNEY J MECHANISMS OF GENOMIC REARRANGEMENTS IN YEAST	UNIVERSITY OF MEDICINE & DENTISTRY OF NJ	NEWARK	NEW JERSEY	82	01-83	1	GEN		26,000	43,225
5	R01 GM27919-03 22300	BRADLEY, TIMOTHY J CONTROL OF ION AND WATER TRANSPORT IN INSECT EPITHELIA	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	03-83	0	CBY		46,963	61,212
5	R01 GM27920-03 22300	FORBUSH, BLISS, III SUBUNIT INTERACTIONS AND THE MECHANISM OF NA, K-ATPASE	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83	0	BIO		56,923	89,938
5	R01 GM27924-03 11850	HAYTON, WILLIAM L RATE LIMITING BARRIERS IN INTESTINAL DRUG ABSORPTION	WASHINGTON STATE UNIVERSITY	PULLMAN	WASHINGTON	82	01-84	0	PHRA		30,208	42,947
5	R01 GM27925-04 21750	HOPPER, JAMES E MOLECULAR BASIS OF INTERCHROMOSOMAL GENE REGULATION	PENNSYLVANIA STATE UNIV HERSHEY MED CTR	HERSHEY	PENNSYLVANIA	82	08-83	1	MBY		90,475	119,639
5	R01 GM27927-03 22400	BACHOVCHIN, WILLIAM W NMR STUDIES OF ENZYME MECHANISMS	TUFTS UNIVERSITY	BOSTON	MASSACHUSETTS	82	07-83	0	BBCB		22,798	35,288
2	R01 GM27929-04 21780	BROACH, JAMES R GENE EXPRESSION OF THE YEAST PLASMID, 2 MICRON CIRCLE	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	08-83	4	GEN		80,000	115,595
5	R01 GM27930-03 21320	HOPPER, ANITA K YEAST MUTANTS IN TRNA-TRANSCRIPTION AND MATURATION	PENNSYLVANIA STATE UNIV HERSHEY MED CTR	HERSHEY	PENNSYLVANIA	81	08-83	0	GEN		59,324	79,817
5	R01 GM27932-03 11940	REBEK, JULIUS, JR NEW EPOXIDATION REAGENTS	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	03-83	0	MCHA		46,824	71,172
5	R01 GM27935-03 21320	GIACOMONI, DARIO CELLULAR DISCRIMINATION OF LIPOSOME-INSERTED MRNAS	UNIVERSITY OF ILLINOIS MEDICAL CENTER	CHICAGO	ILLINOIS	82	11-83	0	MBY		54,602	85,725

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5	R01 GM27937-03 21600	LANGMORE, JOHN P CHROMOSOME STRUCTURE	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	03-83	0	CTY		57,483	90,823
5	R01 GM27939-03 22400	VAN WART, HAROLD E METALLOENZYMES AND CONNECTIVE TISSUE METABOLISM	FLORIDA STATE UNIVERSITY	TALLAHASSEE	FLORIDA	82	03-83	0	BMT		44,010	63,594
5	R23 GM27942-03 13250	GRUNDY, BETTY L EFFECTS OF ANESTHETICS ON CORTICAL EVOKED POTENTIALS	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	81	10-82	0	SGYA		29,894	45,338
5	R01 GM27945-04 22600	FIXMAN, MARSHALL THEORETICAL CHEMISTRY AND POLYMERS	COLORADO STATE UNIVERSITY	FORT COLLINS	COLORADO	82	06-83	3	BBCB		89,340	124,004
2	R01 GM27946-03 13420	GANN, DONALD S HORMONAL AND CARDIOVASCULAR RESPONSE TO TRAUMA	RHODE ISLAND HOSPITAL	PROVIDENCE	RHODE ISLAND	82	06-83	4	SAT		132,243	201,971
2	R01 GM27947-03 11940	NEGISHI, EI-ICHI OLEFINS AND CHIRAL ALIPHATICS VIA ORGANOMETALLICS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	08-83	2	BMT		56,578	78,119
5	R01 GM27949-30 21200	ROMAN, HERSCHEL L GENETIC INVESTIGATIONS IN YEAST--SACCHAROMYCES	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	03-83	2	GEN		55,509	74,027
5	R01 GM27950-03 21600	SEALE, RONALD L NUCLEOSOME-DNA INTERACTIONS IN CHROMATIN REPLICATION	SCRIPPS CLINIC AND RESEARCH FOUNDATION	LA JOLLA	CALIFORNIA	82	02-83	1	CTY		101,700	167,703
5	R01 GM27951-04 22600	GIBBS, JULIAN H STATISTICAL MECHANICS OF BIOLOGICAL MACROMOLECULES	AMHERST COLLEGE	AMHERST	MASSACHUSETTS	82	08-83	0	BBCB		44,300	66,704
5	R01 GM27953-03 22400	LANGERMAN, NEAL R ENERGY STATE OF FLAVOPROTEINS	UTAH STATE UNIVERSITY	LOGAN	UTAH	82	06-83	0	BBCA		30,256	40,671
5	R01 GM27955-03 22600	DEL BENE, JANET E HYDROGEN BONDING, H+ & LI+ ASSOCIATION--MOLECULAR ORBIT	YOUNGSTOWN STATE UNIVERSITY	YOUNGSTOWN	OHIO	82	07-83	0	BBCA		26,340	32,045
5	R01 GM27965-03 21800	HAMILTON, ANDREW E SIGNIFICANCE OF CENTRIC FUSION IN LEMUR EVOLUTION	TULANE UNIVERSITY OF LOUISIANA	NEW ORLEANS	LOUISIANA	82	06-83	0	MGN		41,496	60,999

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5	R01 GM27968-03 21600	BURGOYNE, LEIGH A THE INTERNAL SPACE AND SURFACES OF EUKARYOTE NUCLEI	FLINDERS UNIVERSITY OF SOUTH AUSTRALIA	BEDFORD PARK	AUSTRALIA	82	07-83	0	CTY	26,173	26,173
5	R01 GM27969-03 22200	FOREST, CHARLENE L FLAGELLAR SEXUAL SIGNALING IN CONDITIONAL MUTANTS	BROOKLYN COLLEGE	NEW YORK	NEW YORK	82	07-83	0	CBY	42,595	68,834
5	R01 GM27970-03 21310	MC GUIRE, PETER M CHARACTERIZATION OF PLACENTAL RNA POLYMERASE II	UNIVERSITY OF FLORIDA	GAINESVILLE	FLORIDA	82	08-83	0	BIO	34,051	48,410
5	R01 GM27973-02 21750	IVARIE, ROBERT D REGULATION OF R PLASMID GENES IN ESCHERICHIA COLI	UNIVERSITY OF GEORGIA	ATHENS	GEORGIA	81	05-83	3	MG	80,159	109,248
5	R01 GM27975-03 22400	SOUTHERLAND, WILLIAM M A STRUCTURAL AND ENZYMIC ANALYSIS OF SULFITE OXIDASES	HOWARD UNIVERSITY	WASHINGTON	DIST OF COL	82	06-83	0	BIO	36,610	65,898
5	R01 GM27976-03 12100	ROBBINS, HERBERT E DESIGN OF CLINICAL TRIALS IN BIOSTATISTICS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	06-83	0	SSS	54,586	92,632
5	R01 GM27983-03 11940	TAYLOR, EDWARD C NOVEL AMINO GROUP TRANFORMATIONS IN HETEROCYCLES	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	08-83	0	MCHA	46,836	76,811
5	R01 GM27989-03 22300	LODISH, HARVEY F STRUCTURE AND BIOSYNTHESIS OF AN HEPATIC RECEPTOR	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	06-83	0	CP	66,945	96,712
5	R01 GM27993-03 22200	RHODES, R KENT PHYSIOLOGICAL SIGNIFICANCE OF A & B CHAIN COLLAGEN	UNIVERSITY OF ALABAMA IN BIRMINGHAM	BIRMINGHAM	ALABAMA	82	06-83	0	PBC	56,202	75,905
5	R01 GM27997-03 21200	KUSHNER, SIDNEY R A BIOCHEMICAL ANALYSIS OF GENETIC RECOMBINATION	UNIVERSITY OF GEORGIA	ATHENS	GEORGIA	82	12-82	1	MG	60,919	83,885
5	R01 GM27999-03 21320	MOLDAVE, KIVIE GENETIC REGULATION OF TRANSLATION IN YEAST	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	08-83	0	BIO	82,488	114,676
5	R01 GM28001-03 21280	SNYDER, LOREN R INTRACELLULAR DNA STRUCTURES AND TRANSCRIPTION	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	07-83	0	MG	66,838	94,242

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5	P01 GM28002-03 22300	GLASER, LUIS MEMBRANE PROPERTIES, INTERACTIONS DURING DIFFERENTIATION	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	07-83	0	SSS		80,558	124,865
5	R01 GM28003-03 21320	NOMURA, MASAYASU RIBOSOME STRUCTURE AND FUNCTION	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	01-83	0	MBY		59,098	84,080
5	R01 GM28005-03 21700	REED, STEVEN I THE CONTROL OF CELL DIVISION IN YEAST	UNIVERSITY OF CALIFORNIA SANTA BARBARA	SANTA BARBARA	CALIFORNIA	82	06-83	0	GEN		61,996	84,568
5	R01 GM28007-03 22200	DEVREOTES, PETER N CAMP SIGNALS MEDIATING AGGREGATION IN DICTYOSTELIUM	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	06-83	0	CBY		43,937	65,506
5	R01 GM28008-03 21600	PROCUNIER, JAMES D ANALYSIS OF EUCARYOTIC REDUNDANT LOCI	RICE UNIVERSITY	HOUSTON	TEXAS	82	06-83	0	GEN		50,564	69,778
5	R01 GM28012-03 22200	BECK, STANLEY D PHOTOPERIODIC REGULATION OF INSECT DEVELOPMENT	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	07-83	0	TMP		41,664	59,580
5	R01 GM28013-03 21200	ITO, JUNETSU REPLICATION OF LINEAR DNA MOLECULES	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	06-83	3	MG		80,388	107,800
5	R01 GM28016-03 21800	FELDMAN, MARCUS W POPULATION GENETICS THEORY	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	0	GEN		55,172	87,172
5	R01 GM28017-03 21750	EGOROV, IGOR K MUTATIONS OF CMAD LOCI IN MOUSE CHROMOSOME 17	JACKSON LABORATORY	BAR HARBOR	MAINE	82	08-83	0	MGN		156,215	226,236
5	R01 GM28021-03 21600	LAWTHER, ROBERT P REGULATION OF THE ILVGEDA OPERON BY ATTENUATION	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA	COLUMBIA	SOUTH CAROLINA	82	06-83	0	MG		60,360	80,817
5	R01 GM28023-03 13420	FLYNN, JOHN T RELATIONSHIPS BETWEEN PROSTANOIDS AND CELLULAR INJURY	THOMAS JEFFERSON UNIVERSITY	PHILADELPHIA	PENNSYLVANIA	82	08-83	0	SAT		28,474	49,545
5	R01 GM28024-02 21800	HOFFMANN, RICHARD J FUNCTION OF GENETICALLY DETERMINED ENZYME VARIATION	IOWA STATE UNIVERSITY OF SCIENCE & TECH	AMES	IOWA	81	11-82	0	GEN		41,752	55,948

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5	R01 GM28027-02 21600	SHINE, JOHN BACTERIAL GENES INVOLVED IN SYMBIOTIC NITROGEN FIXATION	AUSTRALIAN NATIONAL UNIVERSITY	CANBERRA	AUSTRALIA	81	11-82 57,322	1	MBC	57,322
5	R01 GM28030-03 13901	GARDINER, JOSEPH C STOPPING RULES IN COMPETING RISK ANALYSES	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	06-83 7,553	0	SSS	10,650
5	R23 GM28032-03 13250	STANSKI, DONALD R INTRAVENOUS ANESTHETICS IN SURGICAL PATIENTS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83 26,601	0	SAT	38,571
5	R01 GM28035-03 22300	ROCK, CHARLES O REGULATION OF MEMBRANE PHOSPHOLIPID STRUCTURE	ST. JUDE CHILDREN'S RESEARCH HOSPITAL	MEMPHIS	TENNESSEE	82	06-83 48,740	0	MBC	66,790
5	R01 GM28036-03 22300	LUEKING, DONALD R THE REGULATION OF PROCARYOTIC PHOSPHOLIPID SYNTHESIS	TEXAS AGRI AND MECH UNIV COLLEGE STATION	COLLEGE STATION	TEXAS	82	07-83 30,618	0	MBC	39,497
5	R01 GM28038-02 21780	ZAHLER, STANLEY A THE DNA OF SPECIALIZED TRANSDUCING PHASE SPBETA	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	81	11-82 37,656	0	MG	50,105
5	R01 GM28039-03 21750	CECH, THOMAS R ENZYMATIC SPLICING OF A RIBOSOMAL RNA PRECURSOR	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	07-83 48,572	0	MBY	67,952
5	R01 GM28040-03 22300	MARTIN, CHARLES E THE ROLE OF STEROLS IN MEMBRANE FUNCTION	RUTGERS THE STATE UNIV NEW BRUNSWICK	NEW BRUNSWICK	NEW JERSEY	82	08-83 37,404	0	CTY	57,999
5	R01 GM28056-03 11910	WUTS, PETER G ALLYLBORANES IN THE SYNTHESIS OF IONOMYCIN AND ANALOGS	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	06-83 47,568	0	MCHA	75,157
5	R01 GM28057-03 21750	WU, FELICIA Y ROLE OF METAL IN GENE EXPRESSION	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	08-83 52,052	0	MBC	77,542
5	R01 GM28063-03 11920	MUSKER, W KENNETH INTRAMOLECULAR EFFECTS ON ELECTRON TRANSFER PROCESSES	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	06-83 42,262	0	BMT	57,814
5	R01 GM28067-02 21400	SUAREZ, BRIAN K GENETIC TRANSMISSION OF VARIANT ANTITRYPSIN ALLE ES	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	81	06-83 65,181	0	MGN	87,369

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5	R01 GM28069-03 21750	WU, CHENG-WEN MECHANISM AND REGULATION OF GENE TRANSCRIPTION	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	12-82	2	BBCA		108,644	161,482
5	R01 GM28070-09 22300	GAFFNEY, BETTY J SPIN LABELING RECEPTORS ON NORMAL AND MALIGNANT CELLS	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	04-83	0	BBCA		58,780	88,170
5	R01 GM28072-03 11880	HOLFORD, NICHOLAS H CLINICAL PHARMACODYNAMICS--DIGOXIN AND QUINIDINE	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	06-83	0	SSS		57,861	73,888
5	R01 GM28075-03 21700	MEYEROWITZ, ELLIOT M GENE STRUCTURE AND FUNCTION IN ANIMAL DEVELOPMENT	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	06-83	0	GEN		73,516	107,820
5	R01 GM28078-03 21310	GREENLEAF, ARNO L BIOCHEMICAL GENETICS OF DROSOPHILA RNA POLYMERASE II	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	06-83	2	GEN		86,786	127,731
5	R01 GM28079-03 21600	BRUTLAG, DOUGLAS L TOPOISOMERASES FOLD AND SEGREGATE CHROMOSOMES	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	2	GEN		83,250	126,431
5	R01 GM28087-03 13200	WANG, HOWARD H FUNCTIONALLY SIGNIFICANT BINDING OF LOCAL ANESTHETICS	UNIVERSITY OF CALIFORNIA SANTA CRUZ	SANTA CRUZ	CALIFORNIA	82	08-83	0	BBCB		37,419	54,295
5	R01 GM28090-03 21600	BOLLON, ARTHUR P ANALYSIS OF YEAST NUCLEAR GENES	WADLEY INSTITUTES OF MOLECULAR MEDICINE	DALLAS	TEXAS	82	06-83	0	GEN		51,741	67,946
5	R01 GM28093-03 21100	BLOOMFIELD, VICTOR A POLYAMINE-POLYNUCLEOTIDE INTERACTIONS	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	06-83	1	BBCA		43,387	60,308
5	R01 GM28097-03 21600	LODISH, HARVEY F CHROMATIN STRUCTURE IN DICTYOSTELIUM DISCOIDEUM	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	06-83	0	CTY		43,068	65,248
5	R01 GM28098-03 21200	HUBERMAN, JOEL A SOLUBLE PROTEINS OF MAMMALIAN DNA REPLICATION	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	06-83	0	MBY		89,417	128,681
5	R01 GM28099-03 21200	JAZWINSKI, S MICHAL BIOCHEMICAL ANALYSIS OF CELL CYCLE CONTROLS	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	07-83	0	MBY		66,949	104,540

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5	R01 GM28108-03 21320	DUBIN, DONALD T TRANSFER RNA SEQUENCES FROM ANIMAL MITOCHONDRIA	RUTGERS MEDICAL SCHOOL	PISCATAWAY	NEW JERSEY	82	08-83	0	MBY		42,968	70,326
5	R01 GM28112-03 12820	WEBER, STEPHEN G CATALYTIC PHOTOELECTROCHEMICAL IMMUNOASSAY	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	06-83	0	SSS		34,980	52,650
5	R01 GM28113-03 21200	MASKER, WARREN E THE FIDELITY OF IN VITRO DNA REPAIR AND REPLICATION	OAK RIDGE NATIONAL LABORATORY	OAK RIDGE	TENNESSEE	82	08-83	0	MG		57,112	57,112
5	R01 GM28117-03 22300	PAPAHADJOPOULOS, DEMETRIOS MECHANISM OF MEMBRANE FUSION	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	07-83	1	BBCB		50,064	63,932
5	R01 GM28120-03 22300	HUI, SEK-WEN EFFECTS OF BILAYER DEFECTS ON MEMBRANE ACTIVITY	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	06-83	0	BBCB		51,179	75,621
5	R01 GM28122-03 11910	STEVENS, ROBERT V THE SYNTHESIS OF ALKALOIDS	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	06-83	0	MCHA		70,083	97,205
5	R01 GM28123-03 11920	RABAN, MORTON CHEMICAL MODELS FOR ACTIVE TRANSPORT OF ALKALI METALS	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	82	06-83	0	BMT		27,464	42,013
5	R01 GM28128-03 11910	LIPSHUTZ, BRUCE H NOVEL APPROACHES TO THE CYCLOPEPTIDE ALKALOIDS	UNIVERSITY OF CALIFORNIA SANTA BARBARA	SANTA BARBARA	CALIFORNIA	82	07-83	0	MCHA		35,314	48,400
5	R01 GM28133-03 21200	SUEOKA, NOBORU IN VITRO INITIATION OF BACILLUS SUBTILIS CHROMOSOME	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	06-83	1	MG		48,147	67,358
5	R01 GM28138-03 2:750	TAKEDA, YOSHINORI DEVELOPMENTAL SWITCH IN PHAGE LAMBDA	UNIVERSITY OF MARYLAND BALT CO CAMPUS	CATONSVILLE	MARYLAND	82	06-83	0	MG		55,262	80,638
2	R01 GM28139-03 22500	LEE, JOHN W STRUCTURE AND INTERACTIONS OF LUMAZINE PROTEIN	UNIVERSITY OF GEORGIA	ATHENS	GEORGIA	82	11-82	2	BBCA		50,540	69,594
5	R01 GM28140-03 22300	CARMAN, GEORGE M PHOSPHATIDYLINOSITOL METABOLISM AND MEMBRANE FUNCTION	RUTGERS THE STATE UNIV NEW BRUNSWICK	NEW BRUNSWICK	NEW JERSEY	82	06-83	0	PC		32,096	50,712

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5	R01 GM28142-03 21780	SYVANEN, MICHAEL GENETIC ANALYSIS OF TRANSPOSABLE	HARVARD UNIVERSITY ELEMENTS	BOSTON	MASSACHUSETTS	82	06-83	1	MG		76,607	148,081
5	R01 GM28143-03 22400	SCHIRCH, LAVERNE G PHYSICAL AND STRUCTURAL STUDIES	VIRGINIA COMMONWEALTH UNIVERSITY OF HYDROXYMETHYLASES	RICHMOND	VIRGINIA	82	06-83	0	PB		47,964	70,114
5	R01 GM28144-03 22400	GLASS, DAVID B SUBSTRATES AND INHIBITORS OF	EMORY UNIVERSITY PROTEIN KINASES	ATLANTA	GEORGIA	82	06-83	0	PC		49,596	74,044
5	R01 GM28147-03 21280	LANSMAN, ROBERT A A GENETIC ANALYSIS OF MAMMALIAN	UNIVERSITY OF GEORGIA MITOCHONDRIAL DNA	ATHENS	GEORGIA	82	11-82	0	MGN		57,846	78,532
5	R01 GM28149-02 22300	NEURINGER, LEO J NMR STUDIES OF NEURAL MEMBRANES	MASSACHUSETTS INSTITUTE OF TECHNOLOGY AND MODEL SYSTEMS	CAMBRIDGE	MASSACHUSETTS	82	03-83	1	BBCB		69,021	96,094
5	R01 GM28155-03 13200	FORD, DOUGLAS J SPECIES DIFFERENCES IN HALOTHANE	UNIVERSITY OF CINCINNATI HEPATOTOXICITY	CINCINNATI	OHIO	82	06-83	0	PHRA		57,619	80,667
5	R01 GM28157-03 11780	WEINSHILBOUM, RICHARD M INHERITED VARIATIONS IN DRUG	MAYO FOUNDATION METABOLIZING ENZYMES	ROCHESTER	MINNESOTA	82	06-83	2	PHRA		73,781	95,530
5	R01 GM28158-03 11860	TYSON, CHARLES A COMPARATIVE IN VITRO METABOLIC	SRI INTERNATIONAL SYSTEMS	MENLO PARK	CALIFORNIA	82	08-83	0	PHRA		54,605	110,724
5	R01 GM28164-03 22400	BOND, GUY H CONTROL OF NA, K-ATPASE BY VANADATE,	KIRKSVILLE COLLEGE OF OSTEOPATHIC MED MG, K, NA, & ATP	KIRKSVILLE	MISSOURI	82	08-83	0	PB		23,249	33,462
5	R01 GM28166-03 22500	DARNALL, DENNIS W SPECTROSCOPIC RULERS AS PROBES	NEW MEXICO STATE UNIVERSITY LAS CRUCES OF HUMAN SERUM ALBUMIN	LAS CRUCES	NEW MEXICO	82	07-83	0	BBCA		38,952	61,934
5	R01 GM28170-03 22300	ORR, GEORGE A PHOSPHOLIPID ANALOGS AND MEMBRANE	YESHIVA UNIVERSITY FUNCTION	NEW YORK	NEW YORK	82	06-83	0	MBC		58,738	109,253
5	R01 GM28171-02 11780	MANNERING, GILBERT J EFFECTS OF INTERFERON ON DRUG	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL METABOLIZING SYSTEMS	MINNEAPOLIS	MINNESOTA	82	08-83	1	PHRA		63,223	87,880

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5	R01 GM28173-03 22450	ROTTENBERG, HAGAI MEMBRANE REGULATION OF MITOCHONDRIAL METABOLISM	HAHNEMANN MED COL & HOSP OF PHILADELPHIA	PHILADELPHIA	PENNSYLVANIA	82	06-83	0 62,021	PB	96,133
5	R01 GM28176-03 22400	JONES, DEAN P MECHANISMS OF HYPOXIC PATHOLOGY	EMORY UNIVERSITY	ATLANTA	GEORGIA	82	06-83	0 55,708	PB	82,622
5	R01 GM28178-02 22400	CHEUNG, WAI YIU THE ROLE OF CALMODULIN IN PROSTAGLANDIN METABOLISM	ST. JUDE CHILDREN'S RESEARCH HOSPITAL	MEMPHIS	TENNESSEE	82	08-83	1 57,807	BIO	79,791
5	R01 GM28188-03 22300	STORRIE, BRIAN PROCESSING OF PINOCYTIC VESICLES IN FIBROBLASTS	VIRGINIA POLYTECHNIC INST AND ST UNIV	BLACKSBURG	VIRGINIA	82	07-83	0 40,921	CBY	60,563
5	R01 GM28189-03 22250	MARGOLIS, ROBERT L REGULATION OF THE MICROTUBULE STEADY-STATE	FRED HUTCHINSON CANCER RESEARCH CENTER	SEATTLE	WASHINGTON	82	06-83	0 47,098	CBY	50,904
5	R01 GM28190-03 22500	SCHUSTER, GARY B PROTON TRANSFER REACTIONS AND PROTON MOBILITY IN WATER	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	06-83	0 30,250	BBCA	43,076
5	R01 GM28193-03 11930	O'DONNELL, MARTIN J SCHIFF BASE SYNTHONS IN AMINO ACID CHEMISTRY	INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS	INDIANAPOLIS	INDIANA	82	07-83	0 47,482	MCHA	68,849
5	R01 GM28194-03 22300	GREEN, MICHAEL NASCENT PROTEIN PROCESSING BY ENDOPLASMIC RETICULUM	ST. LOUIS UNIVERSITY	SAINT LOUIS	MISSOURI	82	08-83	0 66,602	MBY	98,883
5	R01 GM28207-03 22300	RAGHAVAN, SRINIVASA SPHINGOLIPID METABOLISM IN HUMAN SKIN FIBROBLASTS	EUNICE KENNEDY SHRIVER CTR MTL RETARDATN	WALTHAM	MASSACHUSETTS	82	07-83	0 63,615	CP	95,677
5	R01 GM28208-03 22200	COOPER, STEPHEN CAMP AND THE DIFFERENTIATION OF DICTYOSTELIUM DISCOIDEUM	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	07-83	0 41,360	CTY	65,349
5	R01 GM28209-03 12930	WAMPLER, JOHN E A UNIQUE LOW-LIGHT IMAGE PROCESSING MICROSCOPE SYSTEM	UNIVERSITY OF GEORGIA	ATHENS	GEORGIA	82	06-83	0 48,466	BBCA	66,738
5	R01 GM28211-03 21280	SUMMERS, ANNE O REGULATION AND STRUCTURE OF THE MER OPERON	UNIVERSITY OF GEORGIA	ATHENS	GEORGIA	82	11-82	0 52,055	MBC	71,680

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5	R01 GM28213-03 12400	SWANSON, CURTIS J LIQUID CRYSTAL THERMOGRAPHY OF CELL HEAT PRODUCTION	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	82	06-83	0	RNM	11,963	19,175
5	R01 GM28214-03 21750	JOHNSON, JAMES R REGULATION OF METHIONINE BIOSYNTHESIS IN E. COLI K12	TEXAS AGRI AND MECH UNIV	COLLEGE STATION COLLEGE STATION	TEXAS	82	06-83	0	MG	42,475	54,213
5	R01 GM28216-08 21750	MICHELS, CORINNE A YEAST--A MODEL FOR STUDYING REGULATION IN CANCER CELLS	QUEENS COLLEGE	NEW YORK	NEW YORK	82	06-83	0	GEN	84,703	138,744
5	R01 GM28220-03 21200	STERNGLANZ, ROLF ISOLATION OF AN E. COLI DNA TOPOISOMERASE I MUTANT	STATE UNIVERSITY NEW YORK	STONY BROOK STONY BROOK	NEW YORK	82	06-83	0	MG	41,102	61,222
5	R01 GM28221-02 12990	PRESTON, KENDALL, JR COMPUTED TISSUE STEREOLOGY	CARNEGIE-MELLON UNIVERSITY	PITTSBURGH	PENNSYLVANIA	82	12-82	2	SSS	128,188	176,815
5	R01 GM28222-03 22500	VALENTINE, JOAN S THE HISTIDYL IMIDAZOLE LIGAND IN METALLOPROTEINS	UNIVERSITY OF CALIFORNIA	LOS ANGELES LOS ANGELES	CALIFORNIA	82	12-82	1	BBCA	65,080	85,255
5	R01 GM28223-03 21400	FRIEDMANN, THEODORE STUDIES OF MAMMALIAN HGPRT GENES	UNIVERSITY OF CALIFORNIA	SAN DIEGO LA JOLLA	CALIFORNIA	82	07-83	0	MGN	124,990	166,362
5	R01 GM28224-03 22300	ROBERTSON, J DAVID STRUCTURE OF PARA-CRYSTALLINE BIOLOGICAL MEMBRANES	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	06-83	0	SSS	101,822	152,733
5	R01 GM28226-03 22400	JACOBSON, GARY R THE STRUCTURE OF THE D-MANNITOL PERMEASE OF E COLI	BOSTON UNIVERSITY	BOSTON	MASSACHUSETTS	82	06-83	0	MBC	34,009	61,080
5	R01 GM28228-03 21700	GUILD, GREGORY M EUKARYOTIC GENES: STRUCTURE, FUNCTION, AND REGULATION	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	06-83	0	GEN	67,896	110,026
5	R01 GM28232-03 21600	OLSON, MAYNARD V PHYSICAL MAPPING OF YEAST CHROMOSOMAL DNA	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	07-83	2	GEN	75,157	114,293
5	R01 GM28236-03 11920	HILL, RICHARD K STEROCHEMICAL STUDIES OF BIOSYNTHETIC REACTIONS	UNIVERSITY OF GEORGIA	ATHENS	GEORGIA	82	12-82	0	BIO	44,638	61,240

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5	R01 GM28241-03 21320	BENJAMIN, DAVID C PROTEIN FOLDING: IMMUNOCHEMICAL AND GENETIC ANALYSES	UNIVERSITY OF VIRGINIA	CHARLOTTESVILLE	VIRGINIA	82	07-83	2	MGN		62,810	91,075
5	R01 GM28242-03 13700	KLUGER, MATTHEW J THE ROLE OF ENDOGENOUS CRYOGEN IN THERMOREGULATION	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	06-83	0	SSS		52,976	83,702
5	R01 GM28250-03 22300	KOPPEL, DENNIS E GLYCOPROTEIN MOBILITIES-MATRIX CONTROLS	UNIVERSITY OF CONNECTICUT HEALTH CENTER	FARMINGTON	CONNECTICUT	82	06-83	0	BBCA		40,010	56,665
5	R01 GM28252-02 21100	BLATTNER, FREDERICK R APPLICATION OF MICROPROCESSORS TO NUCLEIC ACID DATA	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	81	07-83	0	SSS		29,124	39,820
5	R01 GM28253-03 12910	FRIZZELL, LEON A ULTRASONICALLY INDUCED CAVITATION IN TISSUES	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	08-83	0	SSS		61,146	87,072
5	R01 GM28254-03 12840	ENKE, CHRISTIE G STRUCTURE DETERMINATION BY TRIPLE QUAD MASS SPECTROMETRY	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	06-83	0	SSS		46,096	64,995
5	R01 GM28262-03 21400	SOKAL, ROBERT R SPATIAL ANALYSIS OF HUMAN VARIATION	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	06-83	0	GEN		43,776	66,758
5	R01 GM28265-03 13700	SULZMAN, FRANK M LIGHT-DARK ENTRAINMENT OF CIRCADIAN RHYTHMS	STATE UNIVERSITY NEW YORK BINGHAMTON	BINGHAMTON	NEW YORK	82	06-83	0	BPO		34,066	48,637
5	R01 GM28267-03 13200	BRIDENBAUGH, PHILLIP O EFFECT OF TONICITY ON SPINAL ANESTHESIA IN THE MONKEY	UNIVERSITY OF CINCINNATI	CINCINNATI	OHIO	82	06-83	0	SAT		36,169	50,637
5	R01 GM28273-03 11940	DANHEISER, RICK L PERICYCLIC REACTIONS FOR ORGANIC SYNTHESIS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	06-83	0	MCHA		45,349	68,704
5	R01 GM28274-03 21750	PEDERSON, THORU GENE TRANSCRIPTION IN DROSOPHILA	WORCESTER FDN FOR EXPER BIOLOGY	SHREWSBURY	MASSACHUSETTS	82	06-83	0	GEN		48,700	77,067
5	R01 GM28277-03 22250	FERAMISCO, JAMES R INJECTION OF FLUORESCENTLY LABELLED PROTEINS INTO CELLS	COLD SPRING HARBOR LABORATORY	COLD SPRING HARB	NEW YORK	82	06-83	0	CBY		44,450	79,165

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5	R01 GM28286-03 22410	HANSON, BARBARA A MANNAN SYNTHESIS INHIBITION BY INOSITOL STARVATION	UNIVERSITY OF KENTUCKY	LEXINGTON	KENTUCKY	82	07-83	0	PC	23,365	34,440
5	R01 GM28289-02 22300	KHORANA, HAR G SYNTHETIC AND BIOLOGICAL STUDIES OF NUCLEIC ACIDS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	11-82	3	BIO	385,224	582,970
5	R01 GM28291-03 12840	VESTAL, MARVIN L PROTEIN SEQUENCING BY LIQUID FLOW MASS SPECTROMETRY	UNIVERSITY OF HOUSTON AT HOUSTON	HOUSTON	TEXAS	82	08-83	0	SSS	34,911	45,384
5	R01 GM28293-03 21100	HAGERMAN, PAUL J FLEXIBILITY OF DNA	UNIVERSITY OF COLORADO HLTH SCIENCES CTR	DENVER	COLORADO	82	06-83	0	BBCA	36,591	46,471
5	R01 GM28294-03 21320	ROBERTSON, HUGH D THE ROLE OF RNA IN THE REGULATION OF GENE EXPRESSION	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	07-83	0	VR	72,953	111,116
5	R01 GM28297-03 21250	HUTCHINSON, FRANKLIN MECHANISMS OF MUTAGENESIS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	07-83	0	MG	61,451	102,558
5	R01 GM28298-03 21750	STALLCUP, MICHAEL R STEROID HORMONE ACTION: MOLECULAR AND GENETIC STUDIES	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA	COLUMBIA	SOUTH CAROLINA	82	06-83	0	MBY	51,535	74,777
5	R01 GM28301-03 21750	WOOLFORD, JOHN L, JR YEAST RIBOSOMAL PROTEIN GENES: STRUCTURE AND FUNCTION	CARNEGIE-MELLON UNIVERSITY	PITTSBURGH	PENNSYLVANIA	82	07-83	0	GEN	61,455	94,705
5	R01 GM28303-03 21750	SCHLESINGER, MILTON J FUNCTION AND REGULATION OF "HEAT-SHOCK" PROTEINS	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	06-83	0	MBY	62,605	97,038
5	R01 GM28306-03 12820	ANDERSON, C WILLIAM A HOMOGENEOUS VOLTAMMETRIC IMMUNOASSAY	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	08-83	0	SSS	37,558	56,337
5	R01 GM28307-03 22250	BEGG, DAVID A CELLULAR AND MOLECULAR BASIS OF CYTOKINESIS	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	06-83	0	CBY	52,370	102,540
5	R01 GM28316-03 11770	BOURNE, HENRY R SOMATIC GENETIC ANALYSIS OF ADENYLATE CYCLASE	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	06-83	0	MGN	59,376	75,615

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5	R01 GM28311-02 21700	EDGAR, ROBERT S MOLECULAR GENETIC STUDIES OF THE NEMATODE CUTICLE	UNIVERSITY OF CALIFORNIA SANTA CRUZ	SANTA CRUZ	CALIFORNIA	82	08-83	1	GEN		92,716	134,531
5	R01 GM28313-03 12930	ALLEN, ROBERT D LASER SCANNING PHASE MODULATION RESEARCH MICROSCOPE	DARTMOUTH COLLEGE	HANOVER	NEW HAMPSHIRE	82	06-83	0	SSS		94,582	140,454
5	R01 GM28314-03 13901	PRENTICE, ROSS L STATISTICAL METHODS FOR FAILURE TIME DATA	FRED HUTCHINSON CANCER RESEARCH CENTER	SEATTLE	WASHINGTON	82	07-83	0	SSS		68,370	78,474
5	R01 GM28321-03 11910	BURKE, STEVEN D ANTIBIOTIC, PROSTANOID, AND STEROID TOTAL SYNTHESIS	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA	COLUMBIA	SOUTH CAROLINA	82	06-83	0	MCHA		44,933	65,198
5	R01 GM28331-03 21750	GROSS, SAMSON R REGULATORY MECHANISMS OF ENZYME SYNTHESIS IN NEUROSPORA	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	07-83	2	MBY		87,062	129,081
5	R01 GM28334-03 21320	DURE, LEON S, III TRANSCRIPTION AND TRANSLATION IN A DEVELOPMENTAL SYSTEM	UNIVERSITY OF GEORGIA	ATHENS	GEORGIA	82	06-83	3	MBY		62,975	85,386
5	R01 GM28336-02 21800	HOCHBERG, KENNETH J POPULATION PROCESSES IN GENETICS AND BIOLOGY	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	81	08-83	0	SSS		12,745	19,245
5	R01 GM28338-03 22300	MOUNTCASTLE, DONALD B TRANSMEMBRANE SIGNALING FOLLOWING RECEPTOR BINDING	UNIVERSITY OF MAINE AT ORONO	ORONO	MAINE	82	06-83	0	BBCb		39,225	57,465
5	R01 GM28339-03 22400	FISHER, JED F CHEMICAL MECHANISMS OF REDUCTIVE METABOLISM	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	06-83	0	PB		36,205	50,325
5	R01 GM28342-03 11760	VATSIS, KOSTAS P CYTOCHROME P-450-B5 INTERACTIONS IN DRUG METABOLISM	NORTHWESTERN UNIVERSITY	CHICAGO	ILLINOIS	82	06-83	0	PB		47,249	65,204
5	R01 GM28345-03 22400	BRADY, DONALD R SOURCE OF REDUCING EQUIVALENTS FOR OXIDATION OF STEROLS	MEMPHIS STATE UNIVERSITY	MEMPHIS	TENNESSEE	82	08-83	0	PB		23,908	32,348
5	R01 GM28348-03 21600	LITMAN, GARY W UNIQUE HISTONE-LIKE CHROMOSOMAL PROTEIN	SLOAN-KETTERING INSTITUTE FOR CANCER RES	NEW YORK	NEW YORK	82	06-83	0	BIO		45,369	68,970

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5	R01 GM28349-03 21600	OLSON, MARK O NUCLEOLAR NONRIBOSOMAL, NONHISTONE PROTEINS	UNIVERSITY OF MISSISSIPPI MEDICAL CENTER	JACKSON	MISSISSIPPI	82	06-83	0	CTY		69,900	91,295
5	R01 GM28351-02 21250	CALKINS, JOHN ACTION SPECTRA OF GENETIC TOXICITIES OF UV RADIATIONS	UNIVERSITY OF KENTUCKY	LEXINGTON	KENTUCKY	81	12-82	0	RAD		42,080	59,122
5	R01 GM28352-22 11910	DJERASSI, CARL MASS SPECTROMETRY IN ORGANIC AND BIOCHEMISTRY	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	02-83	1	SSS		119,227	188,379
5	R01 GM28354-03 21320	REEVES, ROBERT H GENETICALLY ALTERED PROLINE TRANSFER RNAS	FLORIDA STATE UNIVERSITY	TALLAHASSEE	FLORIDA	82	01-83	0	PC		31,670	45,318
5	R01 GM28356-03 21400	ELSTON, ROBERT C GENETIC ANALYSIS OF MULTIFACTORIAL TRAITS	LOUISIANA STATE UNIV MED CTR NEW ORLEANS	NEW ORLEANS	LOUISIANA	82	11-82	1	GEN		77,088	102,527
5	R01 GM28358-04 22500	ORME-JOHNSON, WILLIAM, III STRUCTURES & MECHANISMS OF ELECTRON TRANSFER ENZYMES	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	06-83	1	BBCB		81,690	121,443
5	R01 GM28359-03 22300	VILLEREAL, MITCHEL L MECHANISMS OF MEMBRANE FUNCTION IN CELL GROWTH	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	03-83	0	MBY		58,025	91,099
5	R01 GM28362-03 21750	ITO, JUNETSU STUDIES OF SPORULATION IN BACILLUS SUBTILIS	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	03-83	0	MBC		63,225	87,101
5	R01 GM28364-02 12100	TURNBULL, BRUCE W STATISTICAL METHODS FOR HEALTH STUDIES	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	01-83	1	SSS		27,497	43,364
5	R01 GM28368-03 22400	CRAVEN, PATRICIA A HEME-DEPENDENT ACTIVATION OF GUANYLATE CYCLASE	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	08-83	0	BIO		51,875	66,988
5	R01 GM28369-02 21200	STAHL, FRANKLIN W GENETIC RECOMBINATION IN YEAST--A MOLECULAR APPROACH	UNIVERSITY OF OREGON	EUGENE	OREGON	82	01-83	1	GEN		58,019	78,074
5	R01 GM28370-03 21750	WULFF, DANIEL L CONTROL OF TRANSCRIPTION AT THE LAMBDA PRE PROMOTER	STATE UNIVERSITY OF NEW YORK AT ALBANY	ALBANY	NEW YORK	82	06-83	3	MG		74,489	106,830

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5	R01 GM28373-03 22400	SMITH, THOMAS E KINETICS AND CHEMISTRY OF ALLOSTERIC INTERACTIONS	HOWARD UNIVERSITY	WASHINGTON	DIST OF COL	82	03-83	3	BIO		63,407	112,733
5	R01 GM28375-02 11920	SORRELL, THOMAS N MODELS FOR MOLYBDENUM ENZYMES	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	01-83	1	BMT		33,248	46,177
5	R01 GM28384-02 11940	SHARPLESS, K BARRY ASYMMETRIC OXIDATION OF ORGANIC COMPOUNDS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	12-82	2	BMT		83,633	129,835
5	R01 GM28386-02 22500	STEPHENS, PHILIP J CHIROPTICAL SPECTROSCOPY OF METALLOPROTEINS	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	01-83	3	BBCA		55,250	78,549
5	R01 GM28397-03 22250	WOLOSEWICK, JOHN J THE CYTOPLASMIC GROUND SUBSTANCE IN TRANSFORMED CELLS	UNIVERSITY OF ILLINOIS MEDICAL CENTER	CHICAGO	ILLINOIS	82	03-83	0	CBY		38,284	60,10[illegible]
5	R01 GM28398-03 12200	MARSH, DONALD J OSCILLATIONS IN ARTERIAL BLOOD PRESSURE	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	08-83	0	CVB		77,411	115,899
5	R01 GM28404-06 22300	MACDONALD, ROBERT C MEMBRANE FUSION	NORTHWESTERN UNIVERSITY	EVANSTON	ILLINOIS	82	02-83	0	BBCB		29,893	41,252
5	R01 GM28405-03 12100	VAN RYZIN, JOHN R STATISTICAL INFERENCE FOR CENSORED SURVIVAL DATA	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	03-83	1	SSS		45,828	76,808
5	R01 GM28407-11 21750	SMITH, ISSAR GENETICS OF THE B SUBTILIS TRANSLATIONAL APPARATUS	PUBLIC HLTH RES INST OF THE CITY OF NY	NEW YORK	NEW YORK	82	06-83	0	MBC		63,692	87,643
5	R01 GM28410-02 22500	RIGGS, AUSTEN F, II STRUCTURE OF HEMOCYANIN	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	12-82	3	PB		50,460	68,121
5	R01 GM28423-03 11880	OIE, SVEIN DISPOSITION AND ABSORPTION IN DISEASE STATES	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	07-83	0	SSS		69,612	88,368
5	P01 GM28428-03 21400	CAVALLI-SFORZA, LUIGI L GENETICS RESEARCH PROJECT	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	04-83	0	SSS		285,015	450,324

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5	R01 GM28430-02 21200	EBERLE, HELEN I REGULATION OF DNA REPLICATION	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	01-83	1	MG		55,022	95,738
1	R01 GM28438-01 22300	NEUMAN, RONALD D LASER LIGHT-SCATTERING STUDIES OF LIPID MONOLAYERS	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	81	01-83	0	BBCB		8,855	12,454
5	R01 GM28444-02 21700	ORIAS, EDUARDO MATING TYPE DETERMINATION IN TETRAHYMENA	UNIVERSITY OF CALIFORNIA SANTA BARBARA	SANTA BARBARA	CALIFORNIA	82	11-82	1	MG		74,754	97,928
5	R01 GM28450-02 22300	COLOMBINI, MARCO PROBING THE MECHANISM OF A VOLTAGE DEPENDENT CHANNEL	UNIVERSITY OF MARYLAND COLLEGE PK CAMPUS	COLLEGE PARK	MARYLAND	82	12-82	1	PHY		42,971	60,389
1	R01 GM28451-01A1 11920	WILSON, LON J MAGNETIC AND MODELING STUDIES OF CYTOCHROME OXIDASE	RICE UNIVERSITY	HOUSTON	TEXAS	82	07-83	2	BMT		66,138	83,784
5	R01 GM28454-02 22450	KRULWICH, TERRY A ATP SYNTHESIS AT LOW PROTONMOTIVE FORCES	MOUNT SINAI SCHOOL OF MEDICINE	NEW YORK	NEW YORK	82	08-83	1	MBC		65,159	97,087
5	R01 GM28455-02 21800	LAURIE-AHLBERG, CATHY C GENETIC VARIATION OF FLIGHT METABOLISM IN DROSOPHILA	NORTH CAROLINA STATE UNIVERSITY RALEIGH	RALEIGH	NORTH CAROLINA	82	01-83	1	GEN		49,665	69,253
5	R01 GM28463-02 21280	HALLICK, RICHARD B STRUCTURE AND ORGANIZATION OF CHLOROPLAST TRNA GENES	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	11-82	1	GEN		59,915	83,112
5	R01 GM28464-02 21480	ELLIOTT, ROSEMARY W DETECTING AND MAPPING SEQUENCE CHANGES IN MOUSE DNA	NEW YORK STATE DEPARTMENT OF HEALTH	ALBANY	NEW YORK	82	11-82	3	MGN		77,710	107,770
5	R01 GM28468-03 11910	PAQUETTE, LEO A SYNTHETIC ELABORATION OF POLYQUINANE NATURAL PRODUCTS	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	82	06-83	0	MCHA		55,073	75,450
5	R01 GM28470-03 21780	GRINDLEY, NIGEL D MECHANISM OF INSERTION SEQUENCE TRANSLOCATION	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	06-83	3	MG		79,226	132,556
5	R01 GM28481-02 21320	CHANG, SIMON H ROLE OF TRANSFER RNA IN CELL DIFFERENTIATION	LOUISIANA STATE UNIV A&M COL BATON ROUGE	BATON ROUGE	LOUISIANA	82	12-82	1	PC		30,377	40,401

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5	R01 GM28482-02 21200	GILL, D MICHAEL FUNCTION OF POLY (ADP-RIBOSE)	TUFTS UNIVERSITY	BOSTON	MASSACHUSETTS	82	12-82 54,933	3	MBY	85,021
5	R01 GM28484-02 12840	MORRIS, MICHAEL D TIME/SPACE RESOLVED THERMAL BLOOMING SPECTROSCOPY	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	12-82 29,793	1	SSS	47,073
5	R01 GM28485-02 13420	ULEVITCH, RICHARD J MOLECULAR PATHOLOGY OF LPS-INDUCED SHOCK AND DIC	SCRIPPS CLINIC AND RESEARCH FOUNDATION	LA JOLLA	CALIFORNIA	82	02-83 49,844	0	SAT	82,193
5	R01 GM28488-02 21200	STEWART, CHARLES R MECHANISM OF PHAGE DNA REPLICATION	RICE UNIVERSITY	HOUSTON	TEXAS	82	12-82 62,668	1	MG	85,855
5	R01 GM28497-02 11940	GREEN, MARK R DYNAMIC STEREOCHEMISTRY	POLYTECHNIC INSTITUTE OF NEW YORK	NEW YORK	NEW YORK	81	11-82 39,809	0	MCHB	64,602
5	R01 GM28499-02 13410	WARD, PETER A THERMAL INJURY, COMPLEMENT, AND LEUKOCYTE DYSFUNCTION	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	12-82 64,787	3	SAT	102,363
5	R23 GM28502-02 13250	CAHALAN, MICHAEL K THE RATE OF METABOLISM OF VOLATILE ANESTHETICS IN MAN	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	11-82 33,950	1	SAT	44,475
5	R01 GM28507-02 21600	MAXAM, ALLAN M METHODS FOR RESOLVING GENE STRUCTURE	SIDNEY FARBER CANCER INSTITUTE	BOSTON	MASSACHUSETTS	82	11-82 89,698	1	GEN	144,031
5	R01 GM28520-02 21750	RUTTER, WILLIAM J SPECIFIC GENE EXPRESSION IN EUCARYOTIC ORGANISMS	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	11-82 128,221	3	MBY	166,650
5	R01 GM28521-02 22300	GERACE, LARRY R STRUCTURE AND FUNCTIONS OF THE NUCLEAR ENVELOPE	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	11-82 52,205	1	CBY	78,303
5	R01 GM28526-02 22300	KEEN, JAMES H CLATHRIN AND MEMBRANE FUNCTION	TEMPLE UNIVERSITY	PHILADELPHIA	PENNSYLVANIA	82	11-82 54,040	1	CP	80,561
5	R01 GM28532-02 22300	LAUTERBUR, PAUL C NMR AND ESR STUDIES OF OUTER MEMBRANE PROTEINS	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	01-83 33,385	1	BBCB	49,075

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5	R01 GM28533-02 21100	TURNER, DOUGLAS H LASER CROSS LINKING OF PROTEINS	UNIVERSITY OF ROCHESTER AND NUCLEIC ACIDS	ROCHESTER	NEW YORK	82	11-82	1	BBCA		25,990	40,446
5	R01 GM28534-02 22500	RHA, CHOKYUN PROTEIN-PROTEIN INTERACTIONS:	MASSACHUSETTS INSTITUTE OF TECHNOLOGY RHEOLOGICAL ASSESSMENT	CAMBRIDGE	MASSACHUSETTS	82	01-83	1	BBCB		41,560	60,393
5	R01 GM28538-02 22300	CANTLEY, LEWIS C, JR MECHANISM OF CATION TRANSPORT REGULATION	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	01-83	1	PB		34,800	53,052
5	R01 GM28540-02 22400	KAZARINOFF, MICHAEL N INTRACELLULAR DEGRADATION OF ENZYMES	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	11-82	1	BIO		34,877	46,825
5	R01 GM28547-02 22400	SEYBERT, DAVID W CYTOCHROME P-450 CATALYZED STEROID HYDROXYLATIONS	DUQUESNE UNIVERSITY	PITTSBURGH	PENNSYLVANIA	82	11-82	1	PB		39,530	61,660
5	R01 GM28550-03 21200	GRINDLEY, NIGEL D STRUCTURE AND FUNCTION OF E COLI PO1A GENE	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	04-83	0	MBC		59,994	94,791
5	R01 GM28553-02 22250	ERICKSON, HAROLD P IMMUNO-ELECTRON MICROSCOPY OF CYTOSKELETAL FILAMENTS	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	04-83	1	MBY		48,004	69,806
5	R01 GM28557-02 21700	DE RIEL, JON K MOLECULAR BIOLOGY OF ERYTHROID DIFFERENTIATION	TEMPLE UNIVERSITY	PHILADELPHIA	PENNSYLVANIA	82	12-82	1	MBY		61,073	87,691
1	R01 GM28559-01A1 22300	REDMAN, COLVIN M BIOGENESIS OF ERYTHROCTYE MEMBRANE PROTEINS	NEW YORK BLOOD CENTER	NEW YORK	NEW YORK	82	08-83	2	CTY		67,019	97,497
5	R01 GM28562-02 12910	EDMONDS, PETER D MECHANISMS OF BIOEFFECTS OF ULTRASONIC RADIATION	SRI INTERNATIONAL	MENLO PARK	CALIFORNIA	82	01-83	1	RNM		72,083	139,458
5	R01 GM28569-02 11910	MC MURRY, JOHN E ALKALOID SYNTHESIS VIA AZIRIDINIUM IONS	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	11-82	1	MCHA		51,306	80,026
5	R01 GM28572-02 21750	MARMUR, JULIUS REGULATION OF GENE EXPRESSION IN YEAST	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	02-83	1	SSS		133,881	246,668

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5	R01 GM28573-02 21600	KUO, MACUS T CHROMOSOME STRUCTURE AND GENE ARRANGEMENT	UNIVERSITY OF TEXAS SYSTEM CANCER CENTER	HOUSTON	TEXAS	82	01-83 77,496	1	MGN	107,332
5	R01 GM28574-02 21800	CHAKRABORTY, RANAJIT EVOLUTIONARY DYNAMICS OF COMPLEX GENETIC TRAITS	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	11-82 13,750	0	MGN	18,975
5	R01 GM28575-02 21750	BURGESS, RICHARD R RNA POLYMERASE SIGMA SUBUNIT: STRUCTURE AND FUNCTION	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	11-82 63,374	3	MG	87,264
5	R01 GM28576-02 12820	FUNK, MAX O ANALYSIS OF THE PEROXIDES OF ARACHIDONATE METABOLISM	UNIVERSITY OF TOLEDO	TOLEDO	OHIO	82	11-82 13,598	0	SSS	20,560
5	R01 GM28577-02 22200	BALIAN, GARY INTERACTION OF CONNECTIVE TISSUE MOLECULES WITH CELLS	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	01-83 35,523	1	PBC	51,058
5	R01 GM28579-03 21600	ASHLEY, TERRY F INVESTIGATION OF CHROMOSOMAL ORGANIZATION IN NUCLEI	UNIVERSITY OF TENNESSEE KNOXVILLE	KNOXVILLE	TENNESSEE	82	03-83 51,355	0	GEN	74,465
5	R01 GM28581-02 12840	MEUZELAAR, HENDRIK L CELL AND TISSUE PROFILING BY AUTOMATED PYROLYSIS-MS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	02-83 68,340	1	SSS	96,168
5	R23 GM28591-02 13450	GELFAND, JEFFREY A BURN INJURY AND SHOCK: THE ROLE OF COMPLEMENT	TUFTS UNIVERSITY	BOSTON	MASSACHUSETTS	82	11-82 33,950	1	SAT	53,811
5	R01 GM28600-02 21600	FREELING, MICHAEL STRUCTURE OF THE ANAEROBIC STRESS GENES	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	02-83 46,220	1	GEN	59,773
5	R01 GM28605-02 21320	KOEPPE, ROGER E, II MOLECULAR STUDIES OF PROTEIN-NUCLEIC ACID RECOGNITION	UNIVERSITY OF ARKANSAS AT FAYETTEVILLE	FAYETTEVILLE	ARKANSAS	82	11-82 29,192	1	PC	39,309
5	R01 GM28609-02 21780	PORTER, RONALD D DEVELOPMENT OF GENETIC ANALYSIS IN BLUE-GREEN ALGAE	PENNSYLVANIA STATE UNIVERSITY UNIV PARK	UNIVERSITY PARK	PENNSYLVANIA	82	01-83 60,299	1	MG	82,007
5	R01 GM28611-02 22500	DESIDERIO, DOMINIC M COLLISION ACTIVATION-FD MASS SPECTROMETRY OF PEPTIDES	UNIVERSITY OF TENN CENTER HEALTH SCIEN	MEMPHIS	TENNESSEE	82	01-83 29,940	1	SSS	41,916

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5	R01 GM28614-02 12930	TIVOL, WILLIAM F ELECTRON ENERGY-LOSS ELEMENT ANALYSIS OF WET CELLS	NEW YORK STATE DEPARTMENT OF HEALTH	ALBANY	NEW YORK	82	02-83	1	SSS		33,868	49,682
1	R01 GM28619-01A1 22500	DIEM, MAX NOVEL PROBES FOR SOLUTION CONFORMATION OF PEPTIDES	HUNTER COLLEGE	NEW YORK	NEW YORK	82	01-83	2	BBCA		65,700	85,013
5	R01 GM28628-02 21750	KALLEN, ROLAND G NUCLEIC ACID SEQUENCES IN MULTIGENE FAMILIES	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	12-82	1	BIO		53,406	86,950
5	R01 GM28630-02 21700	BENDER, WELCOME W MOLECULAR GENETICS OF TWO DROSOPHILA LOCI	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	11-82	1	GEN		51,912	100,925
1	R01 GM28632-01A1 21600	ARNHEIM, NORMAN STRUCTURE OF AN UNUSUAL MOUSE INTERSPERSED DNA SEQUENCE	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	08-83	2	MGN		64,047	92,815
5	R01 GM28634-02 21250	SINGER, BRITTA S DETERMINANTS OF MUTABILITY IN BACTERIOPHAGE T4	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	01-83	1	GEN		57,438	80,126
5	R01 GM28636-02 11920	AVERILL, BRUCE A SYNTHETIC AND PHYSICAL APPROACHES TO METALLOPROTEINS	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	12-82	1	BMT		45,881	63,872
5	R01 GM28643-02 22300	JORDAN, PETER C ELECTROSTATIC MODELLING OF ION PORES	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	12-82	1	PHY		31,172	50,499
5	R01 GM28644-02 22200	PANTAZIS, NICHOLAS J FUNCTION AND MOLECULAR STRUCTURE OF GROWTH FACTORS	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	11-82	1	CP		43,051	59,410
5	R01 GM28651-02 21100	ITAKURA, KEIICHI SOLID-PHASE SYNTHESIS OF POLYNUCLEOTIDES	CITY OF HOPE NATIONAL MEDICAL CENTER	DUARTE	CALIFORNIA	82	03-83	0	PC		28,882	41,532
5	R01 GM28652-02 22550	MEEHAN, EDWARD J, JR MOLECULAR STRUCTURE OF PISUM SATIVUM LECTIN	UNIVERSITY OF ALABAMA IN HUNTSVILLE	HUNTSVILLE	ALABAMA	82	11-82	1	BBCB		26,900	35,983
5	R01 GM28657-02 22200	DAVID, JOHN D ROLE OF CELL SURFACE PROTEINS IN MYOGENESIS	UNIVERSITY OF MISSOURI COLUMBIA	COLUMBIA	MISSOURI	82	11-82	1	CTY		39,863	54,014

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1	R01 GM28659-01A1 21100	TOPICH, JOSEPH A STRUCTURE-REACTIVITY CORRELATIONS FOR MO COMPLEXES	VIRGINIA COMMONWEALTH UNIVERSITY	RICHMOND	VIRGINIA	82	08-83	2	BMT		36,231	47,664
5	R01 GM28660-02 22250	WISE, DWAYNE A CONTROL OF CHROMOSOME DISTRIBUTION AT MEIOSIS	MISSISSIPPI STATE UNIVERSITY	MISSISSIPPI STAT	MISSISSIPPI	82	11-82	1	CBY		30,994	39,547
5	R01 GM28663-02 11910	FUNK, RAYMOND L NEW CYCLIZATION METHODS FOR NATURAL PRODUCT SYNTHESIS	UNIVERSITY OF NEBRASKA LINCOLN	LINCOLN	NEBRASKA	82	11-82	2	BNP		48,760	66,795
5	R01 GM28668-02 22550	UNWIN, NIGEL DIFFRACTION STUDIES OF GAP JUNCTIONS AND RIBOSOMES	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	11-82	1	BBCB		21,020	33,212
5	R01 GM28669-02 21700	GELBART, WILLIAM M PATTERN FORMATION AND GENE ORGANIZATION IN DROSOPHILA	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	11-82	2	GEN		63,263	94,725
5	R01 GM28672-02 21800	YOKOYAMA, SHOZO POPULATION GENETICS OF DELETERIOUS GENES	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	12-82	1	MGN		26,270	40,719
1	R01 GM28673-01A1 22300	FARLEY, ROBERT A THE STRUCTURE OF (NA-K) ATPASE	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	03-83	2	PB		54,476	71,547
5	R01 GM28675-02 21600	MARTINSON, HAROLD G NUCLEOSOME FUNCTION	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	11-82	3	BIO		39,593	51,867
5	R01 GM28677-02 21600	DE LANGE, ROBERT J NUCLEOSOMAL STRUCTURE, ASSEMBLY, AND FUNCTION	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	11-82	3	BIO		106,333	138,459
5	R01 GM28680-02 21750	STRAUSBAUGH, LINDA D GENETICS OF HISTONE DNA IN DROSOPHILA	UNIVERSITY OF CONNECTICUT STORRS	STORRS	CONNECTICUT	82	01-83	1	GEN		50,486	77,612
5	R01 GM28685-02 21320	GOLD, LAWRENCE M TRANSLATIONAL REGULATION: THE T4 RIIB CISTRON	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	11-82	3	PC		119,289	166,408
5	R01 GM28688-02 11920	DUNAWAY-MARIANO, DEBRA INVESTIGATIONS OF PHOSPHORYL TRANSFER REACTIONS	UNIVERSITY OF MARYLAND COLLEGE PK CAMPUS	COLLEGE PARK	MARYLAND	82	01-83	1	PB		52,813	74,994

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5	R01 GM28689-02 13420	EHRLICH, H PAUL ABNORMAL HEALING IN A MUTANT MOUSE MODEL	MASSACHUSETTS GENERAL HOSPITAL	BOSTON	MASSACHUSETTS	82	12-82	1	SAT	58,901	63,363
5	R01 GM28697-02 21320	GREENBERG, JAY R MRNA-PROTEIN INTERACTIONS IN POLYRIBOSOMES	WORCESTER FDN FOR EXPER BIOLOGY	SHREWSBURY	MASSACHUSETTS	82	02-83	1	MBY	49,653	82,961
5	R01 GM28699-03 21600	FARRON-FURSTENTHAL, F REGULATION OF NUCLEAR PROTEIN KINASES	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	04-83	0	MBY	52,220	68,408
5	R01 GM28702-02 22250	PIPERNO, GIANNI MICROTUBULES OF MITOTIC APPARATUS	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	01-83	1	CBY	52,533	79,720
5	R01 GM28703-02 22400	BOWMAN, BARRY J EUCARYOTIC H+-ATPASES OF PLASMA MEMBRANES AND VACUOLES	UNIVERSITY OF CALIFORNIA SANTA CRUZ	SANTA CRUZ	CALIFORNIA	82	01-83	1	PB	78,672	98,349
5	R01 GM28704-02 22300	HACKENBROCK, CHARLES R STRUCTURAL AND FUNCTIONAL ENGINEERING OF A BIOMEMBRANE	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	11-82	2	PB	59,000	82,364
5	R01 GM28706-02 21750	PARKINSON, JOHN S OVERLAPPING GENES IN ESCHERICHIA COLI	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	11-82	1	GEN	45,126	65,433
5	R01 GM28709-02 21200	LIVINGSTON, DENNIS M BIOCHEMISTRY OF GENETIC RECOMBINATION IN YEAST	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	01-83	1	GEN	46,573	61,539
5	R01 GM28710-02 21280	HOWELL, NEIL MITOCHONDRIAL GENETICS OF MAMMALIAN CELLS	SIDNEY FARBER CANCER INSTITUTE	BOSTON	MASSACHUSETTS	82	12-82	1	MGN	53,954	87,533
5	R01 GM28717-02 21750	GARDNER, JEFFREY F REGULATORY MUTATIONS IN THE THREONINE OPERON	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	11-82	1	MG	58,160	81,548
5	R01 GM28719-03 21400	RAO, DABEERU C PATH ANALYSIS OF FAMILY RESEMBLANCE	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	06-83	2	MGN	66,988	103,831
5	R01 GM28731-02 22500	HENSLEY, PRESTON QUATERNARY INTERACTIONS IN A MULTIENZYME COMPLEX	GEORGETOWN UNIVERSITY	WASHINGTON	DIST OF COL	82	11-82	1	BBCA	28,280	39,650

TABLE-1 RESEARCH GRANTS ACTIVE AS OF 09-30-82 BY GRANT NUMBER

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5	R01 GM28737-02 11920	WHITE, RONALD E MODES OF OXYGEN ACTIVATION BY CYTOCHROME P-450	UNIVERSITY OF CONNECTICUT HEALTH CENTER	FARMINGTON	CONNECTICUT	82	11-82	1	PB		47,343	68,197
1	R01 GM28744-01A1 21320	HAGUE, DONALD R REGULATION OF SYNTHESIS OF CO2-FIXING ENZYMES OF MAIZE	UNIVERSITY OF OREGON	EUGENE	OREGON	82	07-83	2	PC		42,143	56,327
5	R01 GM28747-02 21600	THOMAS, JOHN O STRUCTURE AND FUNCTION OF THE NUCLEAR RNP COMPLEXES	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82	11-82	1	PC		44,349	66,302
5	R01 GM28749-02 21750	BOYER, HERBERT W DISSECTION OF PROCARYOTIC PROMOTER FUNCTIONS	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	01-83	3	MG		86,877	113,809
5	R01 GM28750-02 12930	FREY, TERRENCE G HIGH RESOLUTION ELECTRON MICROSCOPY OF MACROMOLECULES	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	03-83	1	BBCB		50,546	82,101
5	R01 GM28754-09 11910	SHIMIZU, YUZURU DELETERIOUS MICROALGAL TOXINS	UNIVERSITY OF RHODE ISLAND	KINGSTON	RHODE ISLAND	82	08-83	0	MCHA		60,933	82,260
5	R01 GM28755-02 21320	GOLD, LAWRENCE M NUCLEIC ACID SEQUENCE ANALYSIS	UNIVERSITY OF COLORADO AT BOULDER	-BOULDER	COLORADO	82	11-82	0	SSS		40,452	56,431
5	R01 GM28757-03 22300	ARNETT, EDWARD M CHIRAL MONOLAYERS	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	06-83	0	BBCB		58,957	87,836
5 1	R01 GM28760-03 21750	KUSHNER, SIDNEY R FUNCTIONAL EXPRESSION OF EUKARYOTIC DNA IN E COLI	UNIVERSITY OF GEORGIA	ATHENS	GEORGIA	82	03-83	0	MBC		64,336	87,083
5	R01 GM28762-03 21400	HIRSCHHORN, KURT STUDIES OF INHERITED STORAGE DISEASES IN CELL CULTURE	MOUNT SINAI SCHOOL OF MEDICINE	NEW YORK	NEW YORK	82	07-83	0	MGN		134,611	200,570
5	R01 GM28764-03 21100	REID, BRIAN R RECOGNITION OF TRANSFER RNA BY PROTEINS	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	08-83	1	PC		77,514	102,526
2	R01 GM28766-02A1 22300	BLOODGOOD, ROBERT A STUDIES ON MEMBRANE-ASSOCIATED MOTILITY	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	06-83	2	CBY		70,665	97,897

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5 R01 GM28767-03 22300	WEBER, HANS J ACTIVE SODIUM TRANSLOCATION IN HALOBACTERIUM HALOBIUM	UNIVERSITY OF CALIFORNIA	SAN FRANCISCO SAN FRANCISCO	CALIFORNIA	82	06-83	0	PB	67,911	86,722
5 R01 GM28769-13 21600	WARNER, ROBERT C STUDIES OF POLYNUCLEOTIDES AND NUCLEIC ACIDS	UNIVERSITY OF CALIFORNIA	IRVINE IRVINE	CALIFORNIA	82	01-83	1	PC	103,554	135,036
5 R01 GM28772-15 21320	MC LAUGHLIN, CALVIN S COMPARATIVE STRUCTURE AND FUNCTION OF RIBOSOMES	UNIVERSITY OF CALIFORNIA	IRVINE IRVINE	CALIFORNIA	82	02-83	3	PC	115,467	146,513
5 R01 GM28773-02 22400	COLLINS, KIM D DIHYDROOROTASE: CATALYSIS AND INHIBITION	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	01-83	1	BIO	48,308	71,962
5 R01 GM28775-02 21200	BROWN, NEAL C STRUCTURE AND FUNCTION OF ANIMAL CELL DNA POLYMERASE A	UNIVERSITY OF MASSACHUSETTS MEDICAL SCH	WORCESTER	MASSACHUSETTS	82	06-83	3	BIO	99,704	177,473
5 R01 GM28777-03 21750	GILES, NORMAN H GENETIC REGULATORY MECHANISMS IN NEUROSPORA	UNIVERSITY OF GEORGIA	ATHENS	GEORGIA	82	06-83	3	GEN	151,714	208,187
5 R01 GM28778-21 22200	EAKIN, RICHARD M STUDIES IN FINE STRUCTURE	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	08-83	0	VID	47,217	67,881
5 R01 GM28779-02 21800	GEER, BILLY W GENETIC AND DIETARY CONTROL OF THE PENTOSE SHUNT	KNOX COLLEGE	GALESBURG	ILLINOIS	82	03-83	1	GEN	45,650	68,981
5 R01 GM28780-02 21600	REEDER, RONALD H ANTIBODIES AGAINST NUCLEOLAR PROTEINS	FRED HUTCHINSON CANCER RESEARCH CENTER	SEATTLE	WASHINGTON	82	03-83	1	MBY	99,850	110,217
1 R01 GM28783-01 12820	IRVING, CHARLES S ASSESSMENT OF ALTERNATIVES IN 13C ISOTOPIC MEASUREMENTS	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	81	05-83	1	SSS	40,160	54,618
5 R01 GM28789-02 22450	DISMUKES, G CHARLES INTERACTION OF COFACTORS IN PHOTOSYNTHETIC ELECTRON TRAN	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	03-83	1	BBCA	36,160	62,220
5 R01 GM28790-02 11910	WEINREB, STEVEN M SYNTHESIS OF SECURINEGA ALKALOIDS	PENNSYLVANIA STATE UNIVERSITY UNIV PARK	UNIVERSITY PARK	PENNSYLVANIA	82	03-83	1	MCHA	61,588	80,568

TABLE-1 RESEARCH GRANTS ACTIVE AS OF 09-30-82 BY GRANT NUMBER

T	GRANT NUMBER / PROGRAM (FINE CODE)	INVESTIGATOR / PROJECT TITLE	GRANTEE INSTITUTION	CITY	STATE	FY	END-DATE	FUT-YRS AVAILABLE	IRG SUB	DOLLARS DIRECT	DOLLARS TOTAL
2	R01 GM28791-03 21750	SOFER, WILLIAM H A SYSTEM FOR ANALYSIS OF GENE CONTROL IN DROSOPHILA	RUTGERS THE STATE UNIV NEW BRUNSWICK	NEW BRUNSWICK	NEW JERSEY	82	06-83	4	GEN	68,486	107,164
5	R01 GM28792-05 11930	FALLER, JOHN W METAL CHELATE PROBES OF DNA-DRUG INTERACTIONS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83	0	BMT	36,306	57,363
5	R01 GM28793-31 22500	CANN, JOHN R PHYSICOCHEMISTRY AND IMMUNOLOGY OF MACROMOLECULES	UNIVERSITY OF COLORADO HLTH SCIENCES CTR	DENVER	COLORADO	82	05-83	3	BBCA	96,150	119,707
5	R01 GM28795-08 22300	TSONG, TIAN Y DYNAMICS OF SYNTHETIC AND BIOLOGICAL MEMBRANE	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	04-83	3	BBCB	72,387	107,081
5	R01 GM28796-08 22450	WILKINS, RALPH C KINETIC STUDIES OF HEMERYTHRIN REACTIONS	NEW MEXICO STATE UNIVERSITY LAS CRUCES	LAS CRUCES	NEW MEXICO	82	04-83	3	BMT	47,508	69,262
5	R01 GM28799-02 22450	MILLER, KENNETH R THE STRUCTURE OF THE PHOTOSYNTHETIC MEMBRANE	BROWN UNIVERSITY	PROVIDENCE	RHODE ISLAND	81	02-83	0	CTY	42,984	66,345
3	R01 GM28799-02S1 22450	MILLER, KENNETH R THE STRUCTURE OF THE PHOTOSYNTHETIC MEMBRANE	BROWN UNIVERSITY	PROVIDENCE	RHODE ISLAND	82	02-83	0	CTY	21,242	34,399
5	R01 GM28803-03 13700	PITTENDRIGH, COLIN S CIRCADIAN RHYTHMS: PROPERTIES OF A COMPLEX PACEMAKER	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	0	BPO	57,015	90,084
5	R01 GM28804-03 13700	WALCOTT, BENJAMIN NEURAL BASIS OF MAGNETIC FIELD DETECTION	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	06-83	0	BPO	37,034	55,240
5	R01 GM28810-02 22300	WU, HENRY C MAMMALIAN CELL SURFACE GENETICS AND BIOCHEMISTRY	U.S. UNIFORMED SERVICES UNIV OF HLTH SCI	BETHESDA	MARYLAND	82	11-82	0	GEN	69,732	69,732
5	R01 GM28811-03 22300	WU, HENRY C BIOCHEMISTRY OF CELL DIVISION IN BACTERIA	U.S. UNIFORMED SERVICES UNIV OF HLTH SCI	BETHESDA	MARYLAND	82	07-83	2	MBC	73,703	73,703
5	R23 GM28812-02 13250	CRONNELLY, ROY PHARMACOKINETICS/DYNAMICS OF MUSCLE RELAXANT ANTAGONISTS	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	03-83	1	PHRA	33,950	44,475

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5 R01 GM28817-15 21600	CHALKLEY, ROGER G STRUCTURE AND FUNCTION OF CHROMOSOMAL NUCLEOHISTONE	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	04-83	1	CTY	80,313	110,832
5 R01 GM28818-17 22400	GOLDBERG, NELSON D KREBS CYCLE AND CYCLIC NUCLEOTIDE CONTROL	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	07-83	1	555	146,681	203,887
5 R01 GM28820-02 21320	KORNBERG, ROGER D STRUCTURE AND PROCESSING OF NUCLEAR RIBONUCLEOPROTEINS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	02-83	1	MBY	81,677	127,942
5 R01 GM28825-09 11770	FELDMAN, DAVID THE ROLE OF RECEPTORS IN GLUCOCORTICOID ACTION	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	08-83	2	END	68,211	115,277
5 R01 GM28826-08 11930	GIBBONS, WILLIAM A STRUCTURE, SPECTROSCOPY, AND FUNCTION OF NEUROPEPTIDES	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	06-83	2	BBCB	73,094	102,979
5 R01 GM28827-03 12320	PIZIALI, ROBERT L THE MECHANICS OF HUMAN BONE AND LONG BONES	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	0	AFY	51,677	80,646
5 R01 GM28828-06 11770	MASAMUNE, SATORU CHELATION-ANTIBIOTICS/TREATMENT OF IRON OVERLOAD	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	07-83	0	BMT	28,147	35,628
5 R01 GM28829-03 12300	ROSE, ROBERT M POLYETHYLENE BEHAVIOR IN JOINT REPLACEMENTS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	07-83	0	AFY	109,916	162,270
5 R01 GM28830-06 22250	HITCHCOCK, SARAH E MOLECULAR BIOLOGY OF REGULATION OF CONTRACTION	CARNEGIE-MELLON UNIVERSITY	PITTSBURGH	PENNSYLVANIA	82	08-83	0	CTY	37,577	57,584
5 R01 GM28831-03 22400	GOFF, HAROLD M HIGH OXIDATION STATE IRON PORPHYRINS	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	07-83	0	BMT	31,272	43,155
5 R01 GM28832-03 22300	PETERSON, SCOTT W ISOLATION OF THE ERYTHROCYTE MEMBRANE CA2+-ATPASE	BOSTON UNIVERSITY	BOSTON	MASSACHUSETTS	82	07-83	0	CBY	34,013	61,087
5 R01 GM28833-03 13420	UITTO, JOUNI J COLLAGEN BIOSYNTHESIS BY CULTURED HUMAN FIBROBLASTS	LOS ANGELES COUNTY HARBOR-UCLA MED CTR	TORRANCE	CALIFORNIA	82	07-83	0	GMA	66,467	88,553

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5	R01 GM28834-03 22400	MAUK, ARTHUR G CYTOCHROME B5-HEMOGLOBIN REDOX COUPLE	UNIVERSITY OF BRITISH COLUMBIA	VANCOUVER	CANADA	82	08-83	0	BMT	29,260	29,260
5	R01 GM28835-03 22300	PENNISTON, JOHN T PURIFICATION AND PROPERTIES OF CA2+ PUMPING ATPASE	MAYO FOUNDATION	ROCHESTER	MINNESOTA	82	07-83	2	PB	68,278	89,476
5	R01 GM28836-02 21700	DODGSON, JERRY ISOLATION AND EXPRESSION OF ERYTHROID-SPECIFIC GENES	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	81	01-83	0	GEN	47,575	66,605
5	R01 GM28837-03 21750	DODGSON, JERRY B CONTROL OF GENE EXPRESSION IN AVIAN ERYTHROPOIESIS	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	07-83	0	GEN	57,636	81,267
5	R01 GM28838-03 21750	PACKMAN, SEYMOUR COPPER METABOLISM IN THE MOTTLED MOUSE	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	07-83	0	MGN	79,487	101,585
5	R01 GM28839-03 22300	FREEDMAN, JEFFREY C ELECTROPHYSIOLOGY OF HUMAN RED BLOOD CELLS	UPSTATE MEDICAL CENTER	SYRACUSE	NEW YORK	82	07-83	0	PHY	27,335	39,665
5	R01 GM28840-03 21400	ADAMS, SHERRILL L ANALYSIS OF HUMAN COLLAGEN GENE EXPRESSION	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	07-83	0	MGN	62,875	102,922
5	R01 GM28842-03 22200	KAUFMAN, STEPHEN J IMMUNOCHEMICAL ANALYSIS OF MYOBLAST DIFFERENTIATION	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	07-83	0	CTY	58,889	83,858
5	R01 GM28844-02 22300	GUTKNECHT, JOHN W ACID/BASE TRANSPORT THROUGH LIPID BILAYER MEMBRANES	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	03-83	1	PHY	31,500	47,250
5	R01 GM28848-02 22550	JEFFREY, GEORGE A CRYSTAL STRUCTURE PHASE DETERMINATION	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	03-83	1	BBCB	28,880	43,898
5	R01 GM28849-02 11910	HEATHCOCK, CLAYTON H STEREOSELECTIVE SYNTHESIS OF POLYETHER IONOPHORES	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	02-83	2	BNP	64,137	84,019
5	R01 GM28850-02 11440	LOUDON, G MARC CARBOXYL-TERMINAL PEPTIDE SEQUENCING	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	08-83	1	MCHA	72,655	100,317

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5	R01 GM28851-02 21600	MOORE, GORDON P ORGANIZATION OF TWO STRUCTURAL GENES IN FOUR DROSOPHILID	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	03-83	1	GEN		57,000	85,362
5	R01 GM28856-03 11920	HOLM, RICHARD H BIOLOGICALLY RELATED IRON-SULFUR CHEMISTRY	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	06-83	3	BMT		120,467	184,709
5	R01 GM28864-02 22450	WEISS, RICHARD L METABOLIC ORGANIZATION IN NEUROSPORA	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	03-83	1	MBC		66,520	87,141
5	R01 GM28874-02 13700	BLIZARD, DAVID A GENETICS, REACTIVITY TO STRESS AND BIOGENIC AMINES	WAKE FOREST UNIVERSITY	WINSTON-SALEM	NORTH CAROLINA	81	06-83	0	BPO		75,286	100,356
5	R01 GM28878-03 21100	LE BRETON, PIERRE R UV PHOTOELECTRON STUDIES OF ELECTRONIC STRUCTURE	UNIVERSITY OF ILLINOIS CHICAGO CIRCLE	CHICAGO	ILLINOIS	82	08-83	0	BBCA		42,036	61,179
5	R01 GM28882-02 12400	MEYERHOFF, MARK E POLYMER MEMBRANE BASED POTENTIOMETRIC GAS SENSORS	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	03-83	1	BMT		38,145	57,833
5	R01 GM28886-02 22250	HAIMO, LEAH T THE POLARITY AND FUNCTION OF MICROTUBULES	UNIVERSITY OF CALIFORNIA RIVERSIDE	RIVERSIDE	CALIFORNIA	82	03-83	1	CBY		42,023	55,050
5	R01 GM28887-03 22300	HENDERSON, ELLEN J PROTEIN TOPOGRAPHY OF D. DISCOIDEUM PLASMA MEMBRANES	GEORGETOWN UNIVERSITY	WASHINGTON	DIST OF COL	82	07-83	0	MBY		39,124	54,683
5	R01 GM28889-03 13420	MELA, LEENA M INTRACELLULAR CHANGES INDUCED BY SHOCK AND TRAUMA	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	08-83	2	SAT		103,952	146,572
5	R01 GM28894-03 22400	GRAFF, GUSTAV PLATELET FUNCTION CONTROL BY REGULATING PHOSPHOLIPASE C	UNIVERSITY OF ILLINOIS MEDICAL CENTER	CHICAGO	ILLINOIS	82	07-83	0	BIO		47,384	74,867
5	R01 GM28897-02 22300	TOSCANO, WILLIAM A, JR MECHANSISM OF CALCIUM STIMULATION OF ADENYLATE CYCLASE	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	03-83	1	CTY		72,200	126,312
5	R01 GM28904-02 21780	ROEDER, GLENNA S MOLECULAR MECHANISMS OF GENETIC RECOMBINATION IN YEAST	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83	1	GEN		61,697	95,161

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5	R01 GM28905-02 21750	BAKKEN, AIMEE H DISSECTING GENE FUNCTION BY ELECTRON MICROSCOPY	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	02-83	1	GEN		60,021	73,734
5	R01 GM28910-02 21250	CAIRNS, JOHN SYSTEMS THAT PROJECT AGAINST MUTAGENESIS	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	08-83	1	CPA		32,664	57,489
5	R01 GM28911-02 13200	KNIGHT, PAUL R, III ANESTHETIC ACTION AND VIRUS REPLICATION	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	03-83	1	SAT		50,831	80,313
5	R01 GM28920-02 21750	SMITH, MALCOLM M REGULATION OF HISTONE GENE EXPRESSION IN YEAST	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	03-83	1	GEN		42,296	60,278
5	R01 GM28921-03 11770	WATSON, JACK T BIOCHEMICAL APPLICATIONS OF MASS SPECTROMETRY	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	07-83	0	555		39,176	55,238
5	R01 GM28923-12 21200	COX, EDWARD C E COLI MUTATOR GENES	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	07-83	0	MBC		68,686	112,645
5	R01 GM28924-03 21280	GUINEY, DONALD G MECHANISM OF PLASMID DNA TRANSFER IN BACTERIA	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	08-83	0	MG		46,565	61,647
5	R01 GM28925-03 21280	MINKLEY, EDWIN G, JR CONJUGAL TRANSFER OF PLASMIDS	CARNEGIE-MELLON UNIVERSITY	PITTSBURGH	PENNSYLVANIA	82	07-83	0	MG		65,961	101,690
5	R01 GM28926-03 21800	RILEY, MONICA EVOLUTION OF THE BACTERIAL GENOME	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	07-83	0	MG		63,915	94,599
5	R01 GM28927-03 21320	TAI, PHANG-CHENG SELECTIVE ACTIONS OF ANTIBIOTICS ON RIBOSOMES	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	08-83	1	MBC		37,258	72,951
5	R01 GM28928-02 22500	JOHNSON, MICHAEL L ANALYSIS OF MODELS OF HEMOGLOBIN ACTION	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	12-82	1	EH		24,346	35,302
5	R01 GM28931-02 21480	SCOTT, ALAN F GLOBIN GENE REGULATION IN NON-HUMAN PRIMATES	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	03-83	1	MGN		74,869	111,454

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5	R01 GM28932-02 22300	GOODENOUGH, DANIEL A MOLECULAR BIOLOGY OF ZONULAE OCCLUDENTES	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	03-83	1	CTY		58,753	113,250
5	R01 GM28934-02 11440	BARANY, GEORGE NEW MILD PROTECTION STRATEGIES FOR PEPTIDE SYNTHESIS	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	03-83	1	MCHA		59,439	80,837
5	R01 GM28938-02 11940	BROOKHART, MAURICE S DEVELOPMENT AND USE OF MANGANESE IN ORGANIC SYNTHESIS	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	06-83	1	BMT		65,172	86,888
5	R01 GM28946-02 21750	DAS, ASIS K GENE REGULATION BY TRANSCRIPTION ANTITERMINATION	UNIVERSITY OF CONNECTICUT HEALTH CENTER	FARMINGTON	CONNECTICUT	82	03-83	1	MG		57,080	81,866
5	R01 GM28947-02 12400	LIU, CHUNG-CHIUN PALLADIUM-PALLADIUM OXIDE MINIATURE PH ELECTRODE	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	82	03-83	0	SB		41,166	62,161
5	R01 GM28949-02 22410	CHAMBERS, JAMES P CHARACTERIZATION OF THE OLIGOSACCHARIDES OF GLUCOSIDASE	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	03-83	1	PBC		37,279	51,445
5	R01 GM28952-02 21320	BERGET, PETER B GENETIC ANALYSIS OF STRUCTURE FORMATION	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	03-83	1	MBC		52,921	71,359
5	R01 GM28954-02 21700	WHITE, KALPANA P DEVELOPMENTAL GENETICS OF NEUROGENESIS	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	03-83	1	GEN		42,099	66,030
5	R01 GM28961-02 11910	KECK, GARY E CHIRAL APPROACHES TO ANTIBIOTIC SYNTHESIS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	05-83	1	MCHA		42,593	61,760
5	R01 GM28962-02 11920	KARLIN, KENNETH D NEW COPPER(I) CHEMISTRY-MODELS FOR METALLOPROTEINS	STATE UNIVERSITY OF NEW YORK AT ALBANY	ALBANY	NEW YORK	82	03-83	1	BMT		40,339	57,368
1	R01 GM28964-01A1 13420	RUSH, BENJAMIN F, JR CELL BIOLOGY OF HEPATOCYTES INJURED BY HEMORRHAGIC SHOCK	UNIVERSITY OF MEDICINE & DENTISTRY OF NJ	NEWARK	NEW JERSEY	82	01-83	2	SAT		70,325	111,755
5	R01 GM28968-02 11910	KELLY, T ROSS SYNTHESIS OF STREPTOLYDIGIN AND ITS CONGENERS	BOSTON COLLEGE	CHESTNUT HILL	MASSACHUSETTS	82	03-83	1	MCHA		78,828	115,525

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5	R01 GM28972-02 21700	MARSH, J LAWRENCE DEVELOPMENTAL CONTROL OF GENE EXPRESSION IN DROSOPHILA	UNIVERSITY OF CALIFORNIA	IRVINE	CALIFORNIA	82	03-83	1	GEN		67,474	86,717
5	R01 GM28975-02 21600	HJELM, REX P, JR ELECTRON MICROSCOPY OF CHROMATIN STRUCTURE	UNIVERSITY OF ILLINOIS MEDICAL CENTER	CHICAGO	ILLINOIS	82	03-83	0	MBY		24,700	38,779
1	R01 GM28978-01A1 22400	HORTON, H ROBERT SULFHYDRYL OXIDASE, GLUTAMYLTRANSFERASE, AND DISULFIDES	NORTH CAROLINA STATE UNIVERSITY	RALEIGH	NORTH CAROLINA	82	08-83	2	PC		49,305	62,227
5	R01 GM28983-02 21750	MANLEY, JAMES L CONTROL OF MRNA SYNTHESIS IN MAMMALIAN CELLS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	03-83	1	MBY		58,317	97,198
5	R01 GM28985-02 21320	LOCKARD, RAYMOND E TOPOGRAPHY OF 18S RIBOSOMAL RNA IN THE 40S SUBUNIT	GEORGE WASHINGTON UNIVERSITY	WASHINGTON	DIST OF COL	82	03-83	1	MBY		49,767	78,599
5	R01 GM28986-02 21600	LIZARDI, PAUL M CHARACTERIZATION OF THE SMALL NUCLEAR RNA'S OF B MORI	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	03-83	1	MBY		59,195	89,969
5	R01 GM28988-02 21250	WALKER, GRAHAM C CELLULAR RESPONSES TO DNA DAMAGE	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	03-83	3	MG		61,280	97,492
5	R01 GM28990-02 11920	GOULD, STEVEN J STUDIES OF ENZYME REACTION MECHANISMS	UNIVERSITY OF CONNECTICUT STORRS	STORRS	CONNECTICUT	82	03-83	1	BNP		33,798	50,561
5	R01 GM28992-02 22300	LATORRE, RAMON IONIC CHANNEL FORMATION MECHANISMS IN LIPID BILAYERS	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	03-83	1	PHY		36,594	71,651
1	R01 GM28994-01A1 22500	RAPOPORT, HENRY STRUCTURE OF PROTEIN-BOUND BILE PIGMENTS	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	04-83	4	BIO		84,530	110,734
5	R01 GM28998-02 21800	TOMPKINS, LAURIE NEUROGENETICS OF CHEMOSENSORY BEHAVIOR IN DROSOPHILA	TEMPLE UNIVERSITY	PHILADELPHIA	PENNSYLVANIA	82	03-83	1	GEN		39,130	52,873
5	R01 GM28999-02 22450	LEMASTERS, JOHN J RATE CONTROL AND THERMODYNAMICS OF OX PHOS	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	03-83	1	PB		37,884	52,886

TABLE-1 RESEARCH GRANTS ACTIVE AS OF 09-30-82 BY GRANT NUMBER

T GRANT NUMBER PROGRAM (FINE CODE)	INVESTIGATOR PROJECT TITLE	GRANTEE INSTITUTION	CITY	STATE	FY	END-DATE	FUT-YRS AVAILABLE	IRG	SUB	DOLLARS DIRECT	DOLLARS TOTAL
5 R01 GM29001-02 21280	MARGOLIASH, EMANUEL CYTOCHROME C MECHANISMS BY RECOMBINANT DNA TECHNIQUES	NORTHWESTERN UNIVERSITY	EVANSTON	ILLINOIS	82	03-83	1	BIO		88,914	121,569
5 R01 GM29002-03 21600	ESPOSITO, MICHAEL S COMPARATIVE ANALYSIS OF MITOTIC & MEIOTIC RECOMBINATION	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	07-83	2	GEN		96,126	137,460
5 R01 GM29006-02 21200	HSIEH, TAO-SHIH DNA TOPOISOMERASE: FUNCTION AND MECHANISM	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	03-83	1	GEN		58,620	87,630
5 R01 GM29007-02 22500	SHIVELY, JOHN E MICROSEQUENCING AND MOLECULAR CLONING OF FIBRONECTINS	CITY OF HOPE NATIONAL MEDICAL CENTER	DUARTE	CALIFORNIA	82	08-83	1	PBC		78,563	112,974
5 R01 GM29009-02 21600	HENIKOFF, STEVEN GENE REGULATION AND CHROMOSOMAL POSTION EFFECTS	FRED HUTCHINSON CANCER RESEARCH CENTER	SEATTLE	WASHINGTON	82	03-83	1	GEN		52,600	59,509
5 R01 GM29011-02 21600	STILES, JOHN I GENETIC AND PHYSICAL ANALYSIS OF THE COR REGION IN YEAST	INDIANA STATE UNIVERSITY TERRE HAUTE	TERRE HAUTE	INDIANA	82	03-83	1	GEN		33,495	43,358
5 R01 GM29016-02 11910	MARIANO, PATRICK S MOLECULAR REARRANGEMENTS IN NATURAL PRODUCT SYNTHESIS	UNIVERSITY OF MARYLAND COLLEGE PK CAMPUS	COLLEGE PARK	MARYLAND	82	03-83	1	MCHA		40,214	54,164
5 R01 GM29025-02 22500	GREENBERG, G ROBERT ROLE OF RIBONUCLEOTIDE REDUCTASE IN DNA REPLICATION	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	03-83	3	MG		60,240	93,750
5 R01 GM29028-02 11910	SMITH, AMOS B, III THE MILBEMYCINS: POTENTIAL ANTILEUKEMIC AGENTS	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	03-83	1	MCHA		56,572	88,469
5 R01 GM29033-02 21400	LISKAY, ROBERT M MOLECULAR GENETIC STUDY OF X CHROMOSOME INACTIVATION	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83	1	MGN		51,553	81,454
5 R01 GM29035-02 11920	SEALY, ROGER C RADICAL REACTIONS OF CATECHOLS AND CATECHOLAMINES	MEDICAL COLLEGE OF WISCONSIN	MILWAUKEE	WISCONSIN	82	03-83	1	PB		34,820	52,230
1 R01 GM29037-01A1 21280	AVADHANI, NAVAYAN G MITOCHONDRIAL GENES AND PLASMIDS IN MAMMALIAN CELLS	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	04-83	3	PBC		56,851	93,804

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5	R01 GM29039-02 22500	KUROSKY, ALEXANDER HUMAN FIBRONECTIN: STRUCTURE AND FUNCTION	UNIVERSITY OF TEXAS MED BR GALVESTON	GALVESTON	TEXAS	82	03-83	3	PBC		67,410	90,330
5	R01 GM29040-02 22200	DAMJANOV, IVAN ACTIVATION OF PRIMORDIAL GERM CELLS TO FORM TERATOMAS	HAHNEMANN MED COL & HOSP OF PHILADELPHIA	PHILADELPHIA	PENNSYLVANIA	82	04-83	1	PTHB		55,467	85,704
1	R01 GM29041-01A1 22500	TSAI, MING-DAW 17 O AND 31P NMR OF BIOPHOSPHATES	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	82	07-83	2	BMT		49,597	67,282
5	R01 GM29042-03 11770	ROSEN, ORA M USE OF MACROPHAGE-LIKE CELL LINES	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	07-83	0	PTR		129,292	238,075
5	R01 GM29044-02 22550	MOFFAT, JOHN K PROTEINS OF PHYSIOLOGICAL INTEREST: STRUCTURE-FUNCTION	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	04-83	3	BBCB		93,000	137,293
5	R01 GM29047-02 21100	HOGAN, MICHAEL E MULTINUCLEAR NMR STUDIES OF DNA INTERNAL MOTIONS	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	03-83	1	BBCA		40,538	65,074
5	R01 GM29048-02 21320	DRAPER, DAVID E RIBOSOMAL RNA STRUCTURE AND INTERACTIONS	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	03-83	1	BBCA		32,638	48,199
5	R01 GM29049-02 21750	SUSSKIND, MIRIAM M FINE-STRUCTURE GENETIC ANALYSIS OF A STRONG PROMOTER	UNIVERSITY OF MASSACHUSETTS MEDICAL SCH	WORCESTER	MASSACHUSETTS	82	03-83	2	MG		57,508	96,364
5	R01 GM29053-02 22300	ROCK, CHARLES O REGULATORY SITES IN MEMBRANE LIPID BIOSYNTHESIS	ST. JUDE CHILDREN'S RESEARCH HOSPITAL	MEMPHIS	TENNESSEE	82	03-83	1	MG		64,894	89,408
5	R01 GM29054-03 21780	RUBIN, GERALD M CONTROL OF GENE EXPRESSION IN ANIMAL CELLS	CARNEGIE INSTITUTION OF WASHINGTON D C	BALTIMORE	MARYLAND	82	08-83	1	CTY		79,078	130,584
5	R01 GM29065-02 13200	COLLINS, J ANESTHESIA-ANALGESIA OF AWAKE SPINAL NEURONS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83	1	SAT		42,844	67,114
5	R01 GM29067-02 21780	CASADABAN, MALCOLM J GENE FUSION AND THE STUDY OF DNA TRANSPOSITION	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	03-83	0	MG		49,957	77,292

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1	R01 GM29072-01A1 22500	KOLLMAN, PETER A MODELING PROTEIN - SMALL MOLECULE INTERACTIONS	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	01-83 50,470	2	BBCA	65,283
5	R01 GM29073-02 11910	SALOMON, ROBERT G TOTAL SYNTHESIS OF K76: COMPLEMENT CASCADE INHIBITORS	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	82	03-83 32,510	1	MCHA	48,580
1	R01 GM29076-01A1 22550	KIM, JUNG-JA P STRUCTURE AND MECHANISM OF A FLAVOPROTEIN DEHYDROGENASE	MEDICAL COLLEGE OF WISCONSIN	MILWAUKEE	WISCONSIN	82	02-83 59,120	2	BBCB	75,294
1	R01 GM29077-01A1 AI 11910	HOYE, THOMAS R ANTIBIOTIC SYNTHESIS	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	01-83 49,210	2	MCHA	64,046
5	R01 GM29078-02 22500	KUPKE, DONALD W CALMODULIN-CA++-MG++ INTERACTIONS: VOLUME PROPERTIES	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	03-83 40,920	0	BBCA	58,670
5	R01 GM29079-02 21100	PACK, GEORGE R THEORY OF CATION INDUCED CONFORMATION CHANGES IN DNA	ROCKFORD SCHOOL OF MEDICINE	ROCKFORD	ILLINOIS	82	03-83 39,948	1	BBCA	62,718
5	R01 GM29085-02 21750	FIGURSKI, DAVID H GENE REGULATION IN BROAD HOST RANGE PLASMIDS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	03-83 61,768	1	MG	103,523
5	R01 GM29086-02 21480	FINNERTY, WILLIAM R GENETICS OF ALKANE UTILIZATION IN ACINETOBACTER	UNIVERSITY OF GEORGIA	ATHENS	GEORGIA	82	02-83 42,521	1	MG	58,551
5	R01 GM29090-02 21600	LEINWAND, LESLIE A STUDY OF A HIGHLY ABUDNDANT SMALL RNA MOLECULE	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	08-83 74,868	1	SSS	136,313
5	R01 GM29091-02 21200	TSENG, BEN Y RNA PRIMING OF EUKARYOTE DNA SYNTHESIS	UNIVERSITY OF CALIFORNIA SAN DIEGO LA JOLLA	LA JOLLA	CALIFORNIA	82	05-83 64,088	1	MBY	83,955
5	R01 GM29093-02 21700	ARTAVANIS-TSAKONAS, SPYRIDON GENE EXPRESSION IN EUKARYOTIC DEVELOPMENT	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83 58,295	1	GEN	89,187
5	R01 GM29097-02 21600	STROBEL, EDWARD CHROMOSOME ORGANIZATION AND STABILITY	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	03-83 47,161	1	GEN	64,389

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5	R01 GM29099-02 22300	KARNAKY, KARL J, JR A NEW MODEL SYSTEM TO STUDY CHLORIDE TRANSPORT	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	12-82	1	PHY		42,621	58,817
5	R01 GM29100-02 21750	RODRIGUEZ, RAYMOND L DNA SEQUENCES CONTROLLING GENE EXPRESSION	UNIVERSITY OF CALIFORNIA	DAVIS DAVIS	CALIFORNIA	82	03-83	1	MG		75,564	97,295
1	R01 GM29106-01 FD 12910	DROST, CORNELIS J ULTRASOUND INTENSITY METER	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	81	03-83	0	RHM		51,569	76,378
5	R01 GM29109-02 21750	PTASHNE, MARK S STRUCTURAL STUDY OF REPRESSOR-OPERATOR INTERACTIONS	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	03-83	1	BBCA		72,913	109,586
1	R01 GM29110-01A1 21600	DETKE, SIEGFRIED IDENTIFYING THE PROTEINS REGULATING THE X CHROMOSOMES	UNIVERSITY OF HLTH SCI/CHICAGO MED SCH	NORTH CHICAGO	ILLINOIS	82	08-83	1	MGN		100,314	166,526
5	R01 GM29111-02 21480	RUDDLE, FRANK H HUMAN GENE LIBRARY	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	06-83	1	SSS		115,201	193,538
5	R01 GM29118-02 21310	JAEHNING, JUDITH A RECONSTRUCTION OF SPECIFIC TRANSCRIPTION IN YEAST	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	03-83	1	GEN		51,124	71,953
5	R01 GM29119-02 21600	BLUMENFELD, MARTIN S AN UNUSUAL NUCLEOSOMAL PROTEIN OF DROSOPHILA	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	03-83	1	GEN		62,906	83,752
2	R01 GM29123-03 12200	OTHMER, HANS G DYNAMIC PATTERN IN CHEMICALLY-REACTING SYSTEMS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	08-83	3	SSS	6	55,844	74,232
5	R01 GM29124-02 21320	KEITH, JERRY M VIRAL /CELLULAR MRNA POST-TRANSCRIPTIONAL PROCESSING	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82	03-83	1	BIO		49,720	75,077
5	R01 GM29127-02 22300	JACOBSON, BRUCE S PLASMA-MEMBRANE REGIONS AS CELLS GROW IN MONOLAYERS	UNIVERSITY OF MASSACHUSETTS AMHERST	AMHERST	MASSACHUSETTS	82	03-83	1	CP		35,702	51,768
5	R01 GM29128-02 11920	GANDOUR, RICHARD D CHEMICAL MODELS OF ENZYMATIC CATALYSIS	LOUISIANA STATE UNIV A&M COL BATON ROUGE	BATON ROUGE	LOUISIANA	82	03-83	1	BNP		42,590	56,645

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5	R01 GM29130-02 22200	BODE, HANS R PATTERN FORMATION IN REGENERATING PIECES OF HYDRA	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	03-83 28,849	1	CBY 37,792	
5	R01 GM29131-02 22200	LILIEN, JACK E SURFACE TRANSFERASE: PROPERTIES & ROLE IN CELL ADHESION	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	03-83 61,223	1	CP 87,549	
5	R01 GM29133-02 22300	HUBBARD, ANN L RECEPTOR-MEDIATED ENDOCYTOSIS IN HEPATOCYTES	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	03-83 65,588	3	CBY 92,382	
5	R01 GM29135-02 13420	LEIBOVICH, S JOSEPH MACROPHAGES, FIBROBLAST STIMULATION, AND WOUND REPAIR	NORTHWESTERN UNIVERSITY	CHICAGO	ILLINOIS	82	12-82 40,008	1	SAT 55,211	
5	R01 GM29139-02 22400	VILLAFRANCA, JOSEPH J MECHANISTIC STUDIES OF HYDROXYLASES	PENNSYLVANIA STATE UNIVERSITY UNIV PARK	UNIVERSITY PARK	PENNSYLVANIA	82	03-83 78,237	1	BIO 105,574	
5	R01 GM29144-02 21100	WEITH, HERBERT L, III SYNTHESIS OF LONG POLYNUCLEOTIDES OF DEFINED SEQUENCE	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	04-83 54,290	1	BIO 74,806	
5	R01 GM29150-02 11920	GOKEL, GEORGE W SYNTHETIC CALCIUM REGULATORS FOR MUSCLE TISSUE	UNIVERSITY OF MARYLAND COLLEGE PK CAMPUS	COLLEGE PARK	MARYLAND	82	05-83 36,809	0	MCHA 52,269	
5	R01 GM29151-02 12840	VESTAL, MARVIN L LASER DESPORTION MASS SPECTROMETRY	UNIVERSITY OF HOUSTON AT HOUSTON	HOUSTON	TEXAS	82	03-83 48,730	1	SSS 63,349	
5	R01 GM29152-02 21750	WILD, JAMES R ORGANIZATION AND REGULATION OF THE ATCASE CISTRONS	TEXAS AGRI AND MECH UNIV COLLEGE STATION	COLLEGE STATION	TEXAS	82	05-83 36,919	1	MG 47,626	
5	R01 GM29153-02 12910	FRANKLIN, DEAN ULTRASONIC INSTRUMENTATION DEVELOPMENT	UNIVERSITY OF MISSOURI COLUMBIA	COLUMBIA	MISSOURI	82	03-83 63,807	1	RNM 84,739	
5	R01 GM29156-02 22200	DIMOND, RANDALL L SYNTHESIS AND LOCALIZATION OF LYSOSOMAL ENZYMES	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	03-83 62,530	1	MBY 89,034	
5	R01 GM29158-02 21100	VON HIPPEL, PETER H MOLECULAR INTERACTION IN T4 DNA REPLICATION COMPLEX	UNIVERSITY OF OREGON	EUGENE	OREGON	82	03-83 72,860	3	MG 97,223	

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5	R01 GM29162-02 21320	EICHLER, DUANE C NUCLEOLAR RIBONUCLEASES IN RIBOSOMAL RNA PROCESSING	UNIVERSITY OF SOUTH FLORIDA	TAMPA	FLORIDA	82	03-83	1	BIO		38,916	58,763
1	R01 GM29165-01 21320	ERNST, VIVIAN G CONTROL OF TRANSLATION BY PROTEIN PHOSPHORYLATION	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	08-83	2	BIO		59,612	86,182
1	R01 GM29169-01A1 12930	FRANK, JOACHIM STRUCTURAL ANALYSIS OF MACROMOLECULAR ASSEMBLIES	NEW YORK STATE DEPARTMENT OF HEALTH	ALBANY	NEW YORK	82	03-83	2	SSS		86,382	121,823
5	R01 GM29172-02 21200	MALONE, ROBERT E ISOLATION & ANALYSIS OF RECOMBINATION GENES IN YEAST	LOYOLA UNIVERSITY MEDICAL CENTER	MAYWOOD	ILLINOIS	82	03-83	1	GEN		91,264	125,273
5	R01 GM29177-02 21480	FALK, CATHERINE T LINKAGE AND ASSOCIATION OF GENETIC MARKERS AND DISEASE	NEW YORK BLOOD CENTER	NEW YORK	NEW YORK	82	03-83	1	MGN		69,375	96,225
5	R01 GM29178-02 21700	EMMONS, SCOTT W GENOME STRUCTURE AND FUNCTION IN THE NEMATODE CAENORHABD	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	03-83	1	GEN		67,742	122,087
5	R01 GM29179-02 21600	WU, RAY DNA SEQUENCE ANALYSIS OF EUCARYOTIC CYTOCHROME C GENES	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	03-83	3	GEN		75,270	108,289
5	R01 GM29182-02 21700	ESPOSITO, ROCHELLE E MEIOTIC RECOMBINATION AND SEGREGATION IN YEAST	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	03-83	3	GEN		99,826	155,587
5	R01 GM29184-02 21100	BOLTON, PHILIP H CONFORMATION AND MOLECULAR DYNAMICS OF BACTERIOPHAGES	WESLEYAN UNIVERSITY	MIDDLETOWN	CONNECTICUT	82	03-83	1	BBCA		25,188	31,595
5	R01 GM29185-03 22300	HUBBARD, ANN L BIOLOGY OF DIFFERENTIATED SURFACE DOMAINS IN HEPATOCYTES	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	08-83	2	CP		97,830	143,745
5	R01 GM29195-05 11910	WHITESELL, JAMES K THE TOTAL SYNTHESIS OF SARRACENIN	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	03-83	1	MCHA		46,216	62,392
5	R01 GM29198-02 11920	DOLPHIN, DAVID H MYELOPEROXIDASE, SIROHEME, B12: SYNTHESIS AND FUNCTION	UNIVERSITY OF BRITISH COLUMBIA	VANCOUVER	CANADA	82	06-83	1	PB		75,549	75,549

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2	R01 GM29200-02A1 21310	WILLIAMS, LUTHER S REGULATIONS OF AMINOACYL-TRNA SYNTHETASE FORMATION	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	03-83 86,117	4	BIO 123,719
5	R01 GM29203-02 21600	REECK, GERALD R INTERACTIONS OF HMG PROTEINS WITH DNA	KANSAS STATE UNIVERSITY	MANHATTAN	KANSAS	82	03-83 26,948	1	PC 37,636
5	R01 GM29204-02 22400	KOZARICH, JOHN W MECHANISM OF GLYOXALASE I AND LACTATE RACEMASE	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83 45,025	1	PB 70,850
5	R01 GM29207-02 21200	ROSENBERG, JOHN M SEQUENCE SPECIFIC DNA PROTEIN INTERACTIONS	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	03-83 59,771	1	BBCA 90,852
5	R01 GM29210-05 22300	FINKELSTEIN, ALAN INTERACTION OF MODEL SYNAPTIC VESICLES WITH LIPID BILAY	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	12-82 98,805	3	PHY 183,777
5	R01 GM29216-03 21200	MISHRA, NAWIN C CHARACTERIZATION OF MAMMALIAN DNA POLYMERASE MUTANTS	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA	COLUMBIA	SOUTH CAROLINA	82	08-83 47,965	0	MGN 69,597
5	R01 GM29217-06 21780	ZUBAY, GEOFFREY L TRANSCRIPTIONAL CONTROL IN INFECTIOUS PLASMIDS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	08-83 63,957	0	MBC 108,535
5	R01 GM29220-02 22400	MALBON, CRAIG C. IMMOBILIZED FLUOROGENIC SUBSTRATES FOR PROTEASES	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	03-83 47,351	1	PC 70,479
5	R01 GM29221-10 21320	WEBB, THOMAS E POST-TRANSCRIPTIONAL CONTROL IN EUKARYOTIC CELLS	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	82	03-83 63,130	1	BIO 86,488
2	R01 GM29222-02 21100	MARZILLI, LUIGI G SYNTHESIS OF NUCLEIC ACID AND NUCLEOTIDE METAL COMPLEXES	EMORY UNIVERSITY	ATLANTA	GEORGIA	82	02-83 66,142	3	BBCA 99,213
5	R01 GM29223-03 13410	NINNEMANN, JOHN L LPS ACTIVATION OF SUPPRESSOR CELLS AFTER BURN INJURY	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	08-83 91,074	0	SAT 123,640
5	R01 GM29224-03 21750	HECHT, NORMAN B GENE EXPRESSION DURING SPERMATOGENESIS	TUFTS UNIVERSITY	MEDFORD	MASSACHUSETTS	82	08-83 46,985	0	REB 76,586

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5	R01 GM29225-02 11920	MARZILLI, LUIGI G METAL COMPLEXES AS MUTIFUNCTIONAL CATALYSTS	EMORY UNIVERSITY	ATLANTA	GEORGIA	81	03-83	0	BMT		42,033	63,397
5	R01 GM29226-02 13410	NINNEMANN, JOHN L IMMUNE CONSEQUENCES OF THERMAL INJURY	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	03-83	1	SAT		56,628	82,111
5	R01 GM29227-11 21600	HATTMAN, STANLEY M DNA MODIFICATION/RESTRICTION IN PRO- AND EUKARYOTES	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	08-83	0	PC		55,928	97,315
5	R01 GM29228-02 22250	MORRIS, N RONALD THE GENETICS OF MICROTUBULE ASSEMBLY AND FUNCTION	RUTGERS THE STATE UNIV NEW BRUNSWICK	NEW BRUNSWICK	NEW JERSEY	82	05-83	3	MBY		95,064	157,331
5	R01 GM29231-03 21320	VOLD, BARBARA S ROLE OF TRNA IN CELLULAR REGULATORY MECHANISMS	SRI INTERNATIONAL	MENLO PARK	CALIFORNIA	82	08-83	3	MG		81,984	161,721
5	R01 GM29232-03 11910	WENKERT, ERNEST ALKALOID SYNTHESIS	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	08-83	1	MCHA		105,525	140,454
5	R01 GM29236-04 22300	JACOBSON, KENNETH A LATERAL MOBILITY OF MOLECULES AT CELL SURFACE	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	08-83	0	BBCA		84,521	114,526
5	R01 GM29238-02 22400	LAW, JOHN H STUDY OF LIPID METABOLISM	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	01-83	1	PC		105,537	150,918
7	R01 GM29240-01 21320	WILSON, G EDWIN, JR BINDING SITE STUDIES OF PROTEIN ELONGATION FACTORS	CLARKSON COLLEGE OF TECHNOLOGY	POTSDAM	NEW YORK	80	08-83	0	BBCA		36,480	52,858
5	R01 GM29241-03 22410	KAMDUTSCH, ANDREW A DOLICHOL SYNTHESIS IN DIFFERENTIATION AND MALIGNANCY	JACKSON LABORATORY	BAR HARBOR	MAINE	82	08-83	0	CTY		49,697	76,183
5	R01 GM29242-02 22500	MARSHALL, JAMES J SYNTHETIC CARBOHYDRATE-PROTEIN CONJUGATES	UNIVERSITY OF NOTRE DAME	NOTRE DAME	INDIANA	81	09-82	0	PC		60,544	92,632
5	R01 GM29243-02 22550	ENGELMAN, DONALD M NEUTRON STUDIES OF BACTERIORHODOPSIN STRUCTURE	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	12-82	1	BBCB		58,770	92,857

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5	R01 GM29244-03 22300	GILVARG, CHARLES STRUCTURE AND SYNTHESIS OF THE BACTERIAL CELL WALL	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	08-83 37,700	0	MBC	59,908
5	R01 GM29245-03 21750	DOWNEY, RONALD J BIOSYNTHESIS OF NITRATE REDUCTASE IN FUNGI	OHIO UNIVERSITY ATHENS	ATHENS	OHIO	82	08-83 29,842	0	MBC	39,541
5	R01 GM29249-03 21480	VANDEBERG, JOHN L ISOZYME GENETICS OF MAMMALS AND BIRDS	SOUTHWEST FOUNDATION FOR RESEARCH & EDUC	SAN ANTONIO	TEXAS	82	08-83 88,341	0	MGN	160,339
5	R01 GM29250-02 13200	HOLADAY, DUNCAN A METABOLISM OF VOLATILE FLUORINATED ANESTHETICS	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	81	02-83 68,451	0	SAT	97,599
5	R01 GM29252-02 21600	GOLDSMITH, MARIAN R ORGANIZATION AND EXPRESSION OF A MULTIGENE FAMILY	UNIVERSITY OF RHODE ISLAND	KINGSTON	RHODE ISLAND	81	08-83 55,687	0	GEN	74,390
5	R01 GM29254-02 13700	FROMMER, GABRIEL P SOMATOSENSORY FUNCTION DURING ANALGESIA	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	81	01-83 19,581	0	BPNB	26,597
5	R01 GM29255-03 22400	ROEHRIG, KARLA L HORMONAL AND DIETARY CONTROL OF ATP CITRATE LYASE	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	82	08-83 25,271	0	NTN	33,659
5	R01 GM29256-11 13410	MANDEL, LAZARO J MECHANISMS OF ACTIVE AND PASSIVE SOLUTE TRANSPORT	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	08-83 54,124	0	PHY	80,686
5	R01 GM29257-03 13420	HARPER, ROBERT A EPIDERMAL GROWTH FACTOR IN HUMAN SKIN AND DISEASE	TEMPLE UNIVERSITY	PHILADELPHIA	PENNSYLVANIA	82	08-83 75,012	0	GMA	119,269
5	R01 GM29258-10 11930	EATON, PHILIP E SYNTHESIS OF DODECAHEDRANE AND HETERODODECAHEDRANES	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	03-83 107,746	1	MCHA	157,533
5	R01 GM29261-03 22250	SHAY, JERRY W TUBULIN AND THE REGULATION OF STEROID BIOGENESIS	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	08-83 31,943	0	CBY	43,283
5	R01 GM29262-03 22400	MILLER, ARNOLD L STUDIES OF LYSOSOMAL GLYCOPROTEINS IN SLIME MOLD	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	08-83 62,380	0	CBY	83,028

TABLE-1 RESEARCH GRANTS ACTIVE AS OF 09-30-82 BY GRANT NUMBER

T	GRANT NUMBER / PROGRAM (FINE CODE)	INVESTIGATOR / PROJECT TITLE	GRANTEE INSTITUTION	CITY	STATE	FY	END-DATE	FUT-YRS AVAILABLE	IRG	SUB	DOLLARS DIRECT	DOLLARS TOTAL
5	R01 GM29263-03 22300	RAYNER, MARTIN D NA+-PORES: PHOTOAFFINITY LABELS FOR SUB-UNIT FUNCTION	UNIVERSITY OF HAWAII AT MANOA	HONOLULU	HAWAII	82	08-83	0	PHY		47,064	66,360
2	R01 GM29265-02 21320	SCHWARTZ, IRA S RIBOSOME BINDING SITES FOR PROTEIN SYNTHESIS FACTORS	NEW YORK MEDICAL COLLEGE	VALHALLA	NEW YORK	82	07-83	2	PC		73,576	110,869
5	R01 GM29272-02 21100	ENGLANDER, S WALTER STUDIES OF STRUCTURE AND DYNAMICS IN NUCLEIC ACID SYSTEM	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	08-83	2	PC		30,733	50,709
5	R01 GM29274-02 21100	MARSHALL, ALAN G SOLUTION STRUCTURE OF RIBOSOMAL 5S RNA AND 5,8S RNA	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	82	12-82	1	BBCA		59,710	80,471
5	R01 GM29276-06 12840	ZARE, RICHARD N APPLICATIONS OF LASER FLUORIMETRY TO BIOMEDICAL ANALYSIS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	1	BMT		63,730	92,782
5	R01 GM29277-02 11890	RUSSELL, FINDLAY E VENOMS OF ANIMALS OF UNITED STATES AND YUGOSLAVIA	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	12-82	1	TOX		54,530	77,440
5	R01 GM29280-02 12320	GOLDSMITH, WERNER HEAD/NECK/UPPER TORSO RESPONSE TO DYNAMIC LOADING	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	06-83	3	AFY		42,009	59,611
5	R01 GM29287-02 22550	KIM, SUNG-HOU STRUCTURES OF ECORI RESTRICTION-MODIFICATION ENZYMES	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	07-83	3	BBCB		59,860	83,265
2	R01 GM29290-02 11940	BOECKMAN, ROBERT K, JR METHODOLOGY FOR THE CONSTRUCTION OF COMPLEX MOLECULES	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	11-82	3	BNP		78,661	132,726
5	R01 GM29291-02 11930	MEYER, RICH B, JR MECHANISM PROBES FOR NUCLEOTIDE BIOSYNTHETIC ENZYMES	WASHINGTON STATE UNIVERSITY	PULLMAN	WASHINGTON	82	11-82	0	MCHA		40,212	58,307
5	R01 GM29300-02 22300	BEELER, TROY J CA 2+ FLUXES AND POTENTIAL OF SARCOPLASMIC RETICULUM	U.S. UNIFORMED SERVICES UNIV OF HLTH SCI	BETHESDA	MARYLAND	82	03-83	1	PB		13,700	13,700
5	P01 GM29301-02 21750	KAFATOS, FOTIS C MOLECULAR AND DEVELOPMENTAL GENETICS OF DROSOPHILA	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	07-83	3	SSS		377,045	577,139

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5	R01 GM29302-02 21320	CHIKARAISHI, DONA M POST-TRANSCRIPTIONAL CONTROL OF GENE EXPRESSION	NATIONAL JEWISH HOSPITAL & RESEARCH CTR	DENVER	COLORADO	82	11-82 61,031	0	MBY	83,977
5	R01 GM29307-02 21700	BRIGGS, ROBERT W A TEMPERATURE SENSITIVE, MATERNAL-EFFECT MUTATION	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	82	07-83 27,042	1	GEN	39,211
5	R01 GM29318-02 22300	LAKOWICZ, JOSEPH R EFFECTS OF HYDROSTATIC PRESSURE ON CELL MEMBRANES	UNIVERSITY OF MARYLAND AT BALTIMORE	BALTIMORE	MARYLAND	82	01-83 24,100	1	BBCA	36,632
1	R01 GM29321-01A1 22300	SALISBURY, JEFFREY L RECEPTOR-MEDIATED ENDOCYTOSIS: MACROMOLECULAR MACHINERY	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	08-83 63,586	2	CP	101,500
5	R01 GM29323-03 22250	DEDMAN, JOHN R BIOLOGICAL ROLE OF INTRACELLULAR CA2+-BINDING PROTEINS	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	08-83 58,410	1	CP	80,606
5 P50	GM29327-02 13300	WILMORE, DOUGLAS W TRAUMA--REGULATORS & MODULATORS OF THE CATABOLIC STATE	PETER BENT BRIGHAM HOSPITAL	BOSTON	MASSACHUSETTS	82	08-83 320,263	3	SRC	401,799
5	R01 GM29332-09 11930	BORCHARDT, RONALD T STRUCTURAL ANALOGS OF S-ADENOSYLMETHIONINE	UNIVERSITY OF KANSAS LAWRENCE	LAWRENCE	KANSAS	82	11-82 66,892	3	PBC	91,272
1	R01 GM29333-01 12100	HEWETT, JOHN E COMPARING GROUPS WHEN RANDOMIZATION IS NOT POSSIBLE	UNIVERSITY OF MISSOURI COLUMBIA	COLUMBIA	MISSOURI	81	12-82 16,061	0	SSS	20,558
1	R01 GM29335-01A1 22450	GREEN, TERRENCE R ENZYMOLOGY OF SUPEROXIDE PRODUCTION BY HUMAN PMN'S	OREGON HEALTH SCIENCES UNIVERSITY	PORTLAND	OREGON	82	04-83 33,271	2	SSS	42,007
1	R01 GM29336-01 12840	ISENBERG, IRVIN PULSE FLUOROMETRY	OREGON STATE UNIVERSITY	CORVALLIS	OREGON	82	01-83 44,260	2	BBCA	57,538
5	R01 GM29338-02 21100	SCHURR, J MICHAEL FLUCTUATIONS AND DYNAMICS OF DNA	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	06-83 55,010	1	BBCA	69,633
5	R01 GM29344-02 22450	STANKOVICH, MARIAN T A SPECTROELECTROCHEMICAL STUDY OF SELECTED FLAVOPROTEINS	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	06-83 40,368	1	PB	56,112

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1	R01 GM29353-01A1 22400	KLAPPER, MICHAEL H CHYMOTRYPSIN DEACYLATION--AN IN-DEPTH STUDY	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	82	06-83	2	PB		75,634	95,109
5	R01 GM29354-02 21700	FRISTROM, JAMES W THE ACTIN MULTIGENE FAMILY OF DROSOPHILA MELANOGASTER	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	07-83	1	GEN		71,731	101,786
5	R01 GM29356-02 21750	JOHNSON, LEE F THYMIDYLATE SYNTHETASE GENE EXPRESSION	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	82	08-83	1	MBY		36,318	49,016
5	R01 GM29357-02 21700	FYRBERG, ERIC A ANALYSIS OF GENE EXPRESSION DURING DROSOPHILA MYOGENESIS	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	06-83	1	GEN		41,932	61,398
5	R01 GM29361-02 21750	CALAME, KATHRYN L TRANSCRIPTION OF IMMUNOGLOBULIN HEAVY CHAIN GENES	UNIVERSITY OF CALIFORNIA	LOS ANGELES LOS ANGELES	CALIFORNIA	82	11-82	1	MGN		67,880	86,675
5	R01 GM29362-02 21280	FOX, THOMAS D CODING AND REGULATION OF YEAST MITOCHONDRIAL GENES	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	08-83	1	GEN		89,166	122,946
5	R23 GM29371-02 13450	GAMELLI, RICHARD L LYMPHOMYELOPOIETIC RESPONSE TO BURN INJURY	UNIVERSITY OF VERMONT & ST AGRIC COLLEGE	BURLINGTON	VERMONT	82	07-83	1	SAT		34,920	52,031
5	R01 GM29374-02 21100	TURNER, DOUGLAS H FLUORESCENCE DETECTED CD STUDIES OF NUCLEIC ACIDS	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	06-83	1	BBCA		18,466	29,574
1	R01 GM29375-01 22500	POLAVARAPU, PRASAD L VIBRATIONAL CIRCULAR DICHROISM STUDIES	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	01-83	2	BBCA		84,390	95,503
1	R01 GM29378-01 22500	KEGELES, GERSON RAPID KINETICS OF AGGREGATING SYSTEMS	UNIVERSITY OF CONNECTICUT STORRS	STORRS	CONNECTICUT	81	12-82	0	BBCB		37,095	55,240
5	R01 GM29379-02 21600	MANIATIS, THOMAS P MOLECULAR GENETICS OF DROSOPHILA ALCOHOL DEHYDROGENASE	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	06-83	3	GEN		104,568	159,955
1	R01 GM29384-01 21750	NIERMAN, WILLIAM C TRANSCRIPTION OF DROSOPHILA HEAT SHOCK AND ACTIN GENES	AMERICAN TYPE CULTURE COLLECTION	ROCKVILLE	MARYLAND	82	03-83	2	GEN		40,959	55,707

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5	R01 GM29387-02 21280	LEWIN, ALFRED S REGULATION OF MITOCHONDRIAL ASSEMBLY	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	82	06-83	1	MBY		69,263	98,136
5	R01 GM29391-02 22600	SCHEINER, STEVE PROTON TRANSFERS IN PROTEINS	SOUTHERN ILLINOIS UNIVERSITY CARBONDALE	CARBONDALE	ILLINOIS	82	06-83	1	BBCA		32,782	46,972
1	R01 GM29392-01 21700	REGIER, JEROME C CELLULAR DIFFERENTIATION AND EVOLUTION OF GENE FAMILIES	NORTHWESTERN UNIVERSITY	EVANSTON	ILLINOIS	82	01-83	2	GEN		85,902	101,445
1	R01 GM29408-01A1 21200	HARI, V STRUCTURE AND REPLICATION OF POTYVIRUSES	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	82	08-83	3	MBC		46,872	64,634
5	R01 GM29415-02 22400	STUMPF, PAUL K THE MOLECULAR STRUCTURE OF FATTY ACID SYNTHETASES	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	08-83	0	PC		57,872	79,169
5	R01 GM29427-02 22550	COOK, WILLIAM J THE MOLECULAR STRUCTURE OF CALMODULIN	UNIVERSITY OF ALABAMA IN BIRMINGHAM	BIRMINGHAM	ALABAMA	82	06-83	1	BBCB		46,260	62,821
5	R01 GM29428-02 22500	BRYANT, ROBERT G BIOPHYSICAL DYNAMICS: MAGNETIC RESONANCE APPROACHES	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	06-83	3	BBCB		76,480	105,371
1	R01 GM29429-01 21600	OLINS, ADA L CHROMATIN STRUCTURE	UNIVERSITY OF TENNESSEE KNOXVILLE	KNOXVILLE	TENNESSEE	82	08-83	2	CTY		55,310	85,197
5	R01 GM29430-02 21750	PARKER, CARL S SPECIFIC IN VITRO TRANSCRIPTION OF STRUCTURAL GENES	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	08-83	1	GEN		65,236	95,109
5	R01 GM29432-02 22400	RAIJMAN, LUISA J THE KINETIC PROPERTIES OF ENZYMES IN SITU	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	07-83	1	BIO		42,448	64,150
1	R01 GM29433-01A1 HL 22400	EDMONDSON, DALE E COVALENT FLAVIN COENZYMES IN FLAVOENZYME CATALYSIS	EMORY UNIVERSITY	ATLANTA	GEORGIA	82	06-83	4	BIO	1	108,066	145,307
1	R01 GM29434-01A1 11850	FELDHOFF, RICHARD C HUMAN PLASMA ALBUMIN: LIGAND BINDING	UNIVERSITY OF LOUISVILLE	LOUISVILLE	KENTUCKY	82	07-83	2	PBC		47,617	62,220

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1	R01 GM29442-01A1 21600	NELSON, DANIEL A ROLE OF HISTONE ACETYLATION IN GENE EXPRESSION	UNIVERSITY OF HOUSTON AT HOUSTON	HOUSTON	TEXAS	82	06-83 67,850	2	CTY 81,865	
5	R01 GM29456-02 21750	GUNSALUS, ROBERT P INTERACTION OF TRP REPRESSOR WITH TRP OPERATOR DNA	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	08-83 55,612	1	MG 77,134	
5	R01 GM29458-02 22500	ROSE, GEORGE D HIERARCHIC SELF-ASSEMBLY IN GLOBULAR PROTEINS	PENNSYLVANIA STATE UNIV HERSHEY MED CTR	HERSHEY	PENNSYLVANIA	82	11-82 23,720	0	BBCA 30,554	
1	R01 GM29460-01A1 22200	LAFFLER, THOMAS G MOLECULAR EVENTS IN THE MITOTIC CYCLE	NORTHWESTERN UNIVERSITY	CHICAGO	ILLINOIS	82	08-83 80,723	2	GEN 113,566	
7	R01 GM29463-01 21200	STAMBROOK, PETER J STUDY OF MAMMALIAN GENES AND THEIR REPLICATION	UNIVERSITY OF CINCINNATI	CINCINNATI	OHIO	81	12-82 67,416	0	GEN 93,034	
5	R01 GM29466-02 21750	TURNBOUGH, CHARLES L, JR REGULATION OF PYRIMIDINE GENE EXPRESSION IN BACTERIA	UNIVERSITY OF ALABAMA IN BIRMINGHAM	BIRMINGHAM	ALABAMA	82	07-83 50,638	1	MG 68,265	
5	R01 GM29468-09 11910	ZIEGLER, FREDERICK E SYNTHETIC STUDIES OF CYTOTOXIC NATURAL PRODUCTS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	08-83 90,566	2	BNP 152,151	
5	R01 GM29470-17 22410	GOLDSTEIN, IRWIN J PROTEIN-CARBOHYDRATE INTERACTION	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	03-83 66,116	3	ALY 104,463	
5	R01 GM29473-02 21700	TATCHELL, KELLY G REGULATION OF THE SILENT MATING TYPE GENES IN YEAST	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	06-83 71,835	1	GEN 105,528	
5	R01 GM29475-03 11910	MARSHALL, JAMES A SYNTHESIS OF TUMOR INHIBITORY COMPOUNDS	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA	COLUMBIA	SOUTH CAROLINA	82	08-83 64,778	1	MCHA 93,091	
5	R01 GM29477-02 22250	HOWARD, THOMAS H STUDY OF ACTIN IN POLYMORPHONUCLEAR LEUKOCYTES	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	08-83 39,644	1	CBY 57,484	
1	R01 GM29478-01 21280	HECKMAN, JOYCE E NUCLEAR GENES FOR MITOCHONDIAL PROTEINS IN NEUROSPORA	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	82	01-83 80,000	2	GEN 99,732	

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5	R01 GM29480-02 21780	FARABAUGH, PHILIP J THE MOLECULAR GENETICS OF THE YEAST TRANSPOSON TY1	UNIVERSITY OF CONNECTICUT HEALTH CENTER	FARMINGTON	CONNECTICUT	82	08-83	1	GEN	74,623	106,097
5	R01 GM29481-02 22200	TAYLOR, BARRY L SENSORY TRANSDUCTION IN BACTERIA	LOMA LINDA UNIVERSITY	LOMA LINDA	CALIFORNIA	82	08-83	1	MBC	59,622	85,852
5	R01 GM29487-02 21310	LUSE, DONAL S CONTROL OF TRANSCRIPTION IN EUKARYOTIC CELLS	UNIVERSITY OF CINCINNATI	CINCINNATI	OHIO	82	06-83	1	MBY	72,004	100,206
5	R01 GM29490-02 21200	BENBOW, ROBERT M MOLECULAR MECHANISMS OF DNA REPLICATION IN XENOPUS LAEVI	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	07-83	3	CTY	78,586	117,879
5	R01 GM29495-02 21320	GALAU, GLENN A REGULATION OF SYNTHESIS OF A HORMONE INDUCED PROTEIN SET	UNIVERSITY OF GEORGIA	ATHENS	GEORGIA	82	06-83	1	MBY	33,713	46,144
1	R01 GM29496-01A1 HD 22250	TASH, JOSEPH S PROTEIN PHOSPHORYLATION IN SPERM FLAGELLAR MOTILITY	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	06-83	2	CTY	75,856	100,446
5	R01 GM29497-02 11430	RICH, DANIEL H INHIBITORS OF AMINOPEPTIDASES	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	08-83	2	BNP	66,700	94,137
5	R01 GM29498-02 22300	LANYI, JANOS K CHARACTERIZATION OF A SODIUM PUMP IN H. HALOBIUM	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	06-83	1	MBC	52,380	71,688
5	R01 GM29500-27 22400	GOTS, JOSEPH S BIOSYNTHESIS AND INTERCONVERSION OF PURINE NUCLEOTIDES	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	05-83	3	BIO	69,842	113,289
5	R01 GM29503-02 22250	STEPHENS, RAYMOND E MECHANOSENSITIVITY AND THE CONTROL OF CILIARY MOVEMENT	MARINE BIOLOGICAL LABORATORY	WOODS HOLE	MASSACHUSETTS	82	06-83	1	CBY	41,976	83,952
1	R01 GM29507-01A1 HL 13410	WARD, PETER A LUNG INJURY PRODUCED BY OXYGEN METABOLITES	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	06-83	4	SAT	89,136	137,819
5	R01 GM29513-02 22250	CLEVELAND, DON W MICROTUBULE REGULATION: CONTROL OF EXPRESSION OF TUBULI	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	06-83	1	MBY	65,083	96,125

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5	R01 GM29514-02 22300	SZOKA, FRANCIS C, JR MICROINJECTION INTO CELLS BY A LIPOSOME SYSTEM	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	03-83	1	CP	48,129	63,049
5	R01 GM29520-02 13200	WYRWICZ, ALICE M MAGNETIC RESONANCE INVESTIGATION OF ANESTHESIA	UNIVERSITY OF ILLINOIS CHICAGO CIRCLE	CHICAGO	ILLINOIS	82	08-83	1	BBCB	37,479	56,593
5	R01 GM29522-02 11770	PERKINS, JOHN P REGULATION OF B-ADRENERGIC RECEPTOR FUNCTION	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	06-83	3	PHRA	69,222	93,441
1	R01 GM29527-01A1 13200	RUSY, BEN F ANESTHETIC INDUCED CARDIAC DEPRESSION	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	04-83	2	SAT	26,898	38,064
1	R01 GM29531-01A1 HL 13420	KARIMAN, KHALIL MONITORING OF CYTOCHROME REDOX STATE IN SHOCK	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	04-83	2	SAT	87,057	119,618
5	R01 GM29532-02 21320	LIARAKOS, CHARLES D STRUCTURE OF ESTROGEN INDUCED HEN OVIDUCT MESSENGER RNAS	MAYO FOUNDATION	ROCHESTER	MINNESOTA	82	08-83	1	MBY	59,176	75,617
1	R01 GM29533-01A1 22550	BAU, ROBERT ABSOLUTE CONFIGURATION STUDIES BY NEUTRON DIFFRACTION	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	05-83	2	BBCA	34,850	53,321
5	R01 GM29535-02 21200	WECHSLER, JAMES A CONTROL OF NORMAL AND ABNORMAL CHROMOSOME GROWTH	PUBLIC HLTH RES INST OF THE CITY OF NY	NEW YORK	NEW YORK	82	12-82	1	MG	86,376	123,103
5	R01 GM29536-05 11770	HARDEN, T KENDALL MUSCARINIC RECEPTOR REGULATION OF ADENYLATE CYCLASE	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	03-83	1	PHRA	41,433	57,840
5	R01 GM29539-02 21750	BERGET, SUSAN M TRANSCRIPTIONAL CONTROL BY SMALL RIBONUCLEOPROTEINS	RICE UNIVERSITY	HOUSTON	TEXAS	82	07-83	1	PC	62,909	86,814
5	R01 GM29540-02 11910	JACOBI, PETER A A SYNTHETIC APPROACH TO SAXITOXIN	WESLEYAN UNIVERSITY	MIDDLETOWN	CONNECTICUT	82	06-83	1	MCHA	48,241	67,317
1	R01 GM29543-01A1 13420	BLOEDOW, DUANE C POSTBURN SERUM DRUG BINDING IN HUMANS	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	07-83	2	PHRA	40,759	55,526

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1	R01 GM29548-01 22550	HENDRICKSON, WAYNE A ANOMALOUS-SCATTERING STUDIES OF PROTEIN STRUCTURE	U.S. NAVAL RESEARCH LABORATORY	WASHINGTON	DIST OF COL	82	01-83	2	BBCB	82,130	82,130
1	R01 GM29549-01A1 11940	NELSEN, STEPHEN F REACTIVITY OF AMINO NITROGEN COMPOUNDS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	06-83	2	MCHA	42,209	58,104
1	R01 GM29554-01 21200	SEEMAN, NADRIAN C PHYSICAL CHEMISTRY OF RECOMBINATIONAL INTERMEDIATES	STATE UNIVERSITY OF NEW YORK AT ALBANY	ALBANY	NEW YORK	82	07-83	2	PC	47,957	66,808
5	R01 GM29558-02 21200	MC ENTEE, KEVIN BIOCHEMISTRY OF RECA PROTEIN STRUCTURE, FUNCTION/CONTROL	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	06-83	1	MG	75,705	102,112
5	R01 GM29569-02 22400	WOOD, HARLAND G ROLE OF INORGANIC POLYPHOSPHATE IN METABOLISM	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	82	06-83	3	MBC	41,315	59,676
1	R01 GM29571-01 HD 11780	MORISHIMA, HISAYO O DRUG RESPONSES IN FETAL IMMATURITY AND/OR ASPHYXIA	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	03-83	2	PHRA	104,891	173,229
1	R01 GM29583-01A1 ES 22500	PETERING, DAVID H STRUCTURE AND REACTIVITY OF METALLOTHIONINES	UNIVERSITY OF WISCONSIN MILWAUKEE	MILWAUKEE	WISCONSIN	82	03-83	2	TOX	90,260	120,472
5	R01 GM29595-03 22400	STUBBE, JOANNE MECHANISM AND INHIBITION OF RIBONUCLEOTIDE REDUCTASE	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	06-83	0	PB	57,728	78,725
5	R01 GM29603-02 21320	ECCLESTON, JOHN F ENERGY TRANSDUCTION IN PROTEIN BIOSYNTHESIS	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	06-83	1	PC	61,804	101,977
1	R01 GM29611-01 AI 11920	THOMAS, MICHAEL J OXYGEN AND OXY-RADICALS IN PHAGOCYTIC KILLING	WAKE FOREST UNIVERSITY	WINSTON-SALEM	NORTH CAROLINA	82	03-83	2	BBCA	42,839	54,424
5	R01 GM29616-02 22550	KOSSIAKOFF, ANTHONY A NEUTRON STUDIES OF PROTEIN DYNAMICS AND SOLVATION	ASSOCIATED UNIV-BROOKHAVEN NATL LAB	UPTON	NEW YORK	82	06-83	1	BBCB	68,340	109,344
5	R23 GM29617-02 13450	ALLMAN, FRANK D HYPERMETABOLISM AFTER SEVERE HEAD TRAUMA IN CHILDREN	CHILDREN'S HOSPITAL OF LOS ANGELES	LOS ANGELES	CALIFORNIA	82	06-83	1	SAT	29,100	42,734

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1	R01 GM29627-01 21750	WANNER, BARRY L PHOSPHATE CONTROLLED GENE EXPRESSION IN E COLI	EMORY UNIVERSITY	ATLANTA	GEORGIA	82	12-82	2	MG		75,715	103,573
5	R01 GM29628-02 13200	MARSHALL, BRYAN E ANESTHESIA & HYPOXIC PULMONARY VASOCONSTRICTION	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	06-83	1	SAT		93,558	148,553
5	R01 GM29630-02 22250	FARMER, STEPHEN R CELL CONFIGURATION & SYNTHESIS OF TUBULIN & ACTIN	BOSTON UNIVERSITY	BOSTON	MASSACHUSETTS	82	06-83	1	MBY		51,251	92,047
5	R01 GM29641-02 13200	KAMPINE, JOHN P THE EFFECTS OF ANESTHETICS ON CARDIOVASCULAR REFLEXES	MEDICAL COLLEGE OF WISCONSIN	MILWAUKEE	WISCONSIN	82	06-83	1	SAT		45,976	54,619
1	R01 GM29643-01 22300	LOW, PHILIP S DRUG DISTRIBUTION PATTERNS IN BIOLOGICAL MEMBRANES	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	08-83	2	BBCB		29,809	41,733
1	R01 GM29647-01 12930	HEUSER, JOHN E 3-D VISUALIZATION OF MEMBRANE CIRCULATION	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	11-82	2	SSS		211,464	261,494
5	R23 GM29664-02 13250	SMITH, DAVID S THE ROLE OF HYPOXIA IN THE PRODUCTION OF CEREBRAL EDEMA	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	06-83	1	SAT		36,375	55,729
5	R01 GM29680-02 12910	VON RAMM, OLAF T HIGH-SPEED ULTRASOUND IMAGING	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	06-83	1	SSS		90,047	135,071
5	R01 GM29681-02 21280	BOGENHAGEN, DANIEL F GENETIC FUNCTIONS OF MAMMALIAN MITOCHONDRIAL DNA	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	06-83	3	PC		52,251	78,082
1	R01 GM29686-01 21200	HINKLE, DAVID C ENZYMATIC MECHANISM OF YEAST DNA REPLICATION	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	01-83	2	BIO		50,242	82,385
1	R01 GM29687-01 21700	DODGSON, JERRY B HISTONE GENE ORGANIZATION AND EXPRESSION IN DEVELOPMENT	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	08-83	2	GEN		46,414	62,492
5	R01 GM29690-02 21100	STELLWAGEN, NANCY C ELECTRIC BIREFRINGENCE OF DNA RESTRICTION FRAGMENTS	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	06-83	1	BBCA		45,865	63,294

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5	R01 GM29697-02 21750	LAI, EUGENE C EUCARYOTIC GENE MUTAGENESIS AND EXPRESSION	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	06-83	1	MGN		82,020	108,847
1	R01 GM29702-01 22400	WILSON, DWIGHT E, JR RNASE DETECTION SYSTEMS	RENSSELAER POLYTECHNIC INSTITUTE	TROY	NEW YORK	82	12-82	0	BIO		6,000	9,600
5	R01 GM29706-02 22300	GOKEL, GEORGE W CA++ SELECTIVE PEPTIDES FOR METABOLIC CONTROL	UNIVERSITY OF MARYLAND AT BALTIMORE	BALTIMORE	MARYLAND	82	11-82	0	MCHA		40,555	61,644
5	R01 GM29707-02 22300	LIPSON, EDWARD D SYSTEM ANALYSIS OF PHYCOMYCES PHOTORESPONSES	SYRACUSE UNIVERSITY AT SYRACUSE	SYRACUSE	NEW YORK	82	06-83	2	BBCA		54,136	83,165
5	R01 GM29709-02 21700	KAUFMAN, THOMAS C MOLECULAR ANALYSIS OF DEVELOPMENT-REGULATING GENES	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	82	08-83	1	GEN		49,899	71,004
5	R01 GM29713-02 21320	JONES, ELIZABETH W GENETIC ANALYSIS OF ENZYME PROCESSING & LOCALIZATION	CARNEGIE-MELLON UNIVERSITY	PITTSBURGH	PENNSYLVANIA	82	06-83	1	GEN		75,419	115,249
5	R01 GM29721-02 21750	LACKS, SANFORD A DNA METHYLATION AND THE REGULATION OF GENE FUNCTION	ASSOCIATED UNIV-BROOKHAVEN NATL LAB	UPTON	NEW YORK	82	06-83	3	MG		61,285	98,056
1	R01 GM29722-01 AG 21700	GOODMAN, REBA DNA METHYLATION AND DIPTERAN DIFFERENTIATION	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	08-83	2	GEN		65,950	107,237
5	R01 GM29723-02 22250	CLARKE, MARGARET CHEMISTRY AND FUNCTION OF DICTYOSTELIUM CALMODULIN	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	06-83	1	CTY		64,139	119,299
7	R01 GM29733-01 21700	SCHMIDT, ROBERT R GENE-ENZYME CONTROL IN EUCARYOTIC CELL CYCLE	UNIVERSITY OF FLORIDA	GAINESVILLE	FLORIDA	81	12-82	0	MBY		54,471	78,229
1	R01 GM29736-01 21200	HABER, JAMES E PHYSICAL MONITORING OF MEIOTIC DNA RECOMBINATION	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	81	03-83	2	GEN		25,838	41,858
5	R01 GM29745-02 12100	LAIRD, NAN M RANDOM EFFECTS MODELS FOR LONGITUDINAL STUDIES	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	08-83	1	SSS		47,220	83,107

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5	R01 GM29750-02 22600	WILSON, KENT R ION TRANSPORT THROUGH MEMBRANE CHANNELS	UNIVERSITY OF CALIFORNIA	SAN DIEGO LA JOLLA	CALIFORNIA	82	06-83	1	BBCB	44,460	59,176
1	R01 GM29754-01 22500	OPELLA, STANLEY J SOLID STATE NMR OF PEPTIDES	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	12-82	2	BBCB	49,740	63,871
1	R01 GM29756-01 AI 22200	REED, PETER W ROLE OF CALCIUM IN STIMULUS-ACTIVATION OF NEUTROPHILS	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	05-83	2	BIO	46,010	71,085
1	R01 GM29758-01 22300	BAYLEY, HAGAN P PROTEIN TOPOGRAPHY IN TRANSIENT MEMBRANCE STATES	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	01-83	2	BBCA	63,310	89,208
5	R01 GM29764-02 21750	LUTKENHAUS, JOSEPH F REGULATION OF EXPRESSION OF CELL DIVISION GENES	UNIVERSITY OF KANSAS COL	HLTH SCI & HOSP KANSAS CITY	KANSAS	82	06-83	1	MG	62,228	83,012
5	R01 GM29765-02 22300	MELLMAN, IRA S ADSORPTIVE ENDOCYTOSIS AND PLASMA MEMBRANE FUNCTION	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	06-83	2	CP	48,859	81,403
5	R01 GM29767-02 11920	ANDERSON, GARY L PYRIDO(2.3-D)PYRIMIDINE RIBONUCLEOSIDES	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	05-83	0	MCHA	28,500	39,330
1	R01 GM29772-01A1 13700	TORGERSON, WARREN S PAIN AND PAIN PATIENTS: SPECIFICATION AND CLASSIFICATION	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	03-83	2	SSS	62,735	93,003
5	R01 GM29775-02 21280	WALBOT, VIRGINIA E VARIATION IN MITOCHONDRIAL GENOTYPE	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	12-82	0	GEN	55,271	87,328
1	R01 GM29776-01 22200	SUSSMAN, MAURICE BIOCHEMISTRY/GENETICS OF MORPHOGENESIS IN D DISCOIDEUM	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	01-83	2	MBC	65,435	91,144
5	R01 GM29778-02 21100	LEVY, GEORGE C 13C AND OTHER NUCLEI NMR OF DNA AND DNA INTERACTIONS	SYRACUSE UNIVERSITY AT SYRACUSE	SYRACUSE	NEW YORK	82	06-83	0	BBCA	36,654	58,280
1	R01 GM29780-01A1 21280	BREEN, GAIL A MAMMALIAN MUTANTS WITH DEFECTS IN COMPLEX I	UNIVERSITY OF TEXAS DALLAS	RICHARDSON	TEXAS	82	07-83	2	BIO 1	75,520	93,202

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5	R01 GM29784-14 11910	FLOSS, HEINZ G BIOSYNTHESIS OF ERGOT ALKALOIDS	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	08-83 74,229	1	BNP 103,921	
5	R01 GM29785-02 12300	GREENWALD, A SETH BONE-IMPLANT INTERFACE ANALYSIS	CLEVELAND RESEARCH INSTITUTE	CLEVELAND	OHIO	82	12-82 18,500	0	AFY 18,500	
5	P41 GM29786-03 12900	EISENBERG, DAVID S LA COMPUTER GRAPHICS TERMINAL FOR MOLECULAR BIOLOGY	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	08-83 14,550	0	SSS 20,181	
9	R01 GM29787-11 21100	SARMA, RAMASWAMY H MAGNETIC RESONANCE STUDIES OF BIOLOGICAL INTERACTIONS	STATE UNIVERSITY OF NEW YORK AT ALBANY	ALBANY	NEW YORK	82	08-83 57,235	4	BBCA 75,321	
5	R01 GM29788-03 21400	GATTI, RICHARD A MHC AND CANCER SUSCEPTIBILITY GENES IN MAN	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	08-83 86,467	0	MGN 118,962	
5	R01 GM29789-02 21480	WHITE, RAYMOND L HUMAN LINKAGE MAPPING WITH DNA POLYMORPHISM	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	12-82 93,218	0	MGN 126,629	
5	R01 GM29791-09 22550	TSERNOGLOU, DEMETRIUS X-RAY DIFFRACTION ANALYSIS OF THROMBIN AND NEUROTOXIN	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	82	01-83 54,480	1	BBCB 74,064	
5	R01 GM29792-05 22200	HILLE, MERRILL B ACTIVATION OF PROTEIN SYNTHESIS IN EGG AND EMBRYOS	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	01-83 49,759	1	MBY 65,949	
5	R01 GM29796-02 13420	CURRERI, P WILLIAM METABOLISM AND NUTRITION IN BURNS AND TRAUMA	UNIVERSITY OF SOUTH ALABAMA	MOBILE	ALABAMA	82	01-83 69,792	2	SAT 88,307	
5	R01 GM29797-02 21480	SIMON, MELVIN I GENETIC AND MOLECULAR MAPPING OF THE MOUSE GENOME	AGOURON INSTITUTE	LA JOLLA	CALIFORNIA	82	02-83 129,836	1	GEN 192,629	
5	R01 GM29798-02 22300	RANDALL, LINDA L EXPORT OF PROTEINS IN ESCHERICHIA COLI	WASHINGTON STATE UNIVERSITY	PULLMAN	WASHINGTON	82	03-83 57,370	0	MBC 82,737	
1	R01 GM29801-01A1 11940	MAGNUS, PHILIP D SYNTHESIS OF MOLECULES OF BIOLOGICAL INTEREST	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	82	03-83 67,051	2	MCHA 92,857	

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1	R01 GM29804-01 22410	OLDEN, KENNETH SEGREGATION, PROCESSING & STABILIZATION OF GLYCOPROTEIN	HOWARD UNIVERSITY	WASHINGTON	DIST OF COL	82	12-82	2	PBC		103,847	186,925
1	R01 GM29805-01 22450	SENIOR, ALAN E OSCP AND F6--TWO SUBUNITS OF MITOCHONDRIAL ATPASE	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	06-83	2	PB		44,681	71,707
5	R01 GM29810-02 21700	WALLACE, BRUCE EVOLUTIONARY AND DEVELOPMENTAL GENETICS OF DROSOPHILA	VIRGINIA POLYTECHNIC INST AND ST UNIV	BLACKSBURG	VIRGINIA	82	03-83	1	GEN		30,072	43,003
5	R01 GM29812-08 21320	MC CLOSKEY, JAMES A STRUCTURAL AND ANALYTICAL STUDIES OF NA CONSTITUENTS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	04-83	2	SSS		107,246	155,507
1	R01 GM29815-01A1 HL 11910	HEATHCOCK, CLAYTON H TOTAL SYNTHESIS OF COMPACTIN AND MEVINOLIN	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	08-83	2	BNP		60,345	83,828
1	R01 GM29818-01 21600	BUNICK, GERALD J STRUCTURAL STUDIES OF NUCLEOSOMES	UNIVERSITY OF TENNESSEE	KNOXVILLE KNOXVILLE	TENNESSEE	82	12-82	2	BBCA		60,765	88,109
5	R01 GM29828-02 21100	HARPST, JERRY A NUCLEOPROTEIN COMPLEXES FROM ADENOVIRUS	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	82	03-83	1	BBCA		53,395	78,872
5	R01 GM29829-02 22550	MAKOWSKI, LEE STRUCTURAL STUDIES OF VIRUSES AND MEMBRANES	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	03-83	1	BBCB		63,710	103,398
5	R01 GM29830-02 22300	MC MAHON, DANIEL S DICTYOSTELIUM DISCOIDEUM PLASMA MEMBRANES	WASHINGTON STATE UNIVERSITY	PULLMAN	WASHINGTON	82	03-83	1	MBC		75,990	110,186
5	R01 GM29831-02 21750	OGATA, RONALD T STRUCTURE AND EXPRESSION OF COMPLEMENT GENES	SCRIPPS CLINIC AND RESEARCH FOUNDATION	LA JOLLA	CALIFORNIA	82	03-83	1	ALY		70,662	116,522
2	R01 GM29832-06A2 AG 21750	MARZLUFF, WILLIAM F, JR CONTROL OF HISTONE MRNA SYNTHESIS	FLORIDA STATE UNIVERSITY	TALLAHASSEE	FLORIDA	82	06-83	2	CTY		82,062	114,130
5	R01 GM29833-08 22410	WAECHTER, CHARLES J DOLICHOL METABOLISM & MEMBRANE GLYCOPROTEIN BIOSYNTHESIS	UNIVERSITY OF MARYLAND AT BALTIMORE	BALTIMORE	MARYLAND	82	05-83	3	PC		83,778	122,784

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5	R01 GM29834-02 22250	WILLIAMS, ROBLEY C, JR BIOCHEMICAL INVESTIGATION OF NEUROFILAMENTS	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	03-83	1	BBCB		33,431	50,561
5	R01 GM29836-02 22300	LESTER, H ALLEN INTRACELLULAR TRANSMITTERS, BIOPHYSICAL STUDIES	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	03-83	1	NEUB		43,545	64,447
5	R01 GM29838-02 22450	POYTON, ROBERT O STRUCTURE AND ASSEMBLY OF CYTOCHROME WITH OXIDASE	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	06-83	1	PB		43,277	59,468
9	R01 GM29840-14 HL 11770	FLEMING, WILLIAM W MECHANISM OF NONSPECIFIC SUPERSENSITIVITY TO DRUGS	WEST VIRGINIA UNIVERSITY	MORGANTOWN	WEST VIRGINIA	82	12-82	3	PHRA		77,351	106,591
1	R01 GM29843-01 22300	HONG, JEN-SHIANG BIOCHEMISTRY AND GENETICS OF MEMBRANE FUNCTIONS	BOSTON BIOMEDICAL RESEARCH INSTITUTE	BOSTON	MASSACHUSETTS	82	11-82	4	MBC		98,523	140,289
1	R01 GM29848-01 21600	DEININGER, PRESCOTT L HUMAN INTERSPERSED REPEATED DNA SEQUENCES	LOUISIANA STATE UNIV MED CTR NEW ORLEANS	NEW ORLEANS	LOUISIANA	81	02-83	2	BIO		73,015	89,220
5	R01 GM29851-02 21750	OESCHGER, MAX P TS NONSENSE SUPPRESSORS OF E COLI K-12	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	06-83	0	MBC		62,580	93,870
3	R01 GM29851-02S1 21750	OESCHGER, MAX P TS NONSENSE SUPPRESSORS OF E. COLI K-12	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	06-83	0	MG		22,751	34,127
1	P01 GM29853-01 13300	STRIKER, GARY E CELL & MOLECULAR RESPONSE TO MECHANICAL & THERMAL INJURY	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	01-83	4	SRC		360,372	450,570
5	R01 GM29860-02 22250	BURRIDGE, KEITH W NONMUSCLE ALPHA-ACTININ AND ACTIN-MEMBRANE INTERACTION	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	03-83	0	CBY		85,295	119,072
1	R01 GM29864-01 AM 22300	MENDELSOHN, RICHARD LIPID CONTROL OF MEMBRANE PROTEIN ORGANIZATION	RUTGERS THE STATE UNIV NEW BRUNSWICK	NEW BRUNSWICK	NEW JERSEY	82	01-83	2	BBCB		61,545	80,421
1	R01 GM29909-01 AI 22400	GIBSON, DAVID T MECHANISMS OF ENZYMATIC OXYGEN FIXATION	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	11-82	4	MBC		88,842	114,323

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1	R01 GM29928-01 21600	BRUENN, JEREMY A RELATEDNESS OF USTILAGE MAYDIS VIRAL DOUBLE-STRANDED RNA	STATE UNIVERSITY OF NEW YORK AT BUFFALO	BUFFALO	NEW YORK	82	01-83	2	MG		44,100	55,712
1	R01 GM29935-01 21600	GARRARD, WILLIAM T FUNCTION OF THE SUBUNITS OF EUKARYOTIC CHROMOSOMES	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	01-83	2	CTY		85,980	113,840
1	R01 GM29955-01 22250	CABRAL, FERNANDO R GENETIC APPROACH TO MICROTUBULE FUNCTION IN CHO CELLS	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	01-83	2	CBY		70,471	86,344
1	R01 GM29963-01 22300	HAZELBAUER, GERALD L MOLECULAR STUDIES OF CHEMORECEPTION	WASHINGTON STATE UNIVERSITY	PULLMAN	WASHINGTON	82	03-83	2	MBC		76,892	107,443
1	R01 GM29972-01A1 CA 11910	GILBERT, JOHN C DEVELOPMENT OF A BIOMIMETIC APPROACH TO TRICHOTHECENES	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	07-83	2	MCHA		61,470	78,697
1	R01 GM29984-01 22500	MICHL, JOSEF PHOTORESOLUTION AND RACEMIZATION KINETICS OF CONFORMERS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	01-83	1	BBCA		30,490	42,636
1	R01 GM29985-01 22500	TRUE, NANCY S ROTATIONAL POTENTIAL FUNCTIONS OF AMIDES	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	01-83	2	BBCA		27,530	35,134
1	R01 GM29986-01 21320	CHIKARAISHI, DONA M REGULATION OF MAMMALIAN RIBOSOMAL 45S RNA SYNTHESIS	NATIONAL JEWISH HOSPITAL & RESEARCH CTR	DENVER	COLORADO	82	08-83	2	MBY		47,975	65,390
1	R01 GM29988-01 21200	PTASHNE, MARK CARCINOGENS AND THE SOS RESPONSE	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	07-83	2	MG		93,941	135,445
1	R01 GM29994-01 22250	ROBERTS, THOMAS M AMOEBOID MOTILITY: A CELLULAR AND GENETIC APPROACH	FLORIDA STATE UNIVERSITY	TALLAHASSEE	FLORIDA	82	12-82	2	TMP		38,327	50,949
1	R01 GM29999-01 12100	HALPERIN, MAX GROWTH CURVE ESTIMATION WITH PROGRESSIVE CENSORING	GEORGE WASHINGTON UNIVERSITY	WASHINGTON	DIST OF COL	82	01-83	1	SSS		38,450	46,051
1	R01 GM30012-01A1 12840	PEISACH, JACK PULSED EPR SPECTROSCOPY OF METALLOPROTEINS	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	07-83	2	555		249,576	294,741

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1 R01 GM30017-01 22500	FORSTER, LESLIE S PROTEIN FLUCTUATIONS AND FLUORESCENCE QUENCHING	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	03-83	2	BBCA	22,070	31,560
1 R01 GM30027-01 21750	SPRAGUE, GEORGE F, JR GENETIC REGULATION OF YEAST CELL TYPE	UNIVERSITY OF OREGON	EUGENE	OREGON	82	01-83	2	GEN	76,092	99,507
5 R01 GM30032-02 21100	SOBELL, HENRY M DRUG-NUCLEIC ACID CRYSTALLINE COMPLEXES	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	07-83	1	SSS	128,389	223,397
1 R01 GM30039-01 NS 13700	PAGE, TERRY L PHYSIOLOGICAL BASIS OF CIRCADIAN ORGANIZATION	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	11-82	2	BPO	29,927	43,240
9 R01 GM30048-04 CA 22550	ROBERTUS, JON D STRUCTURAL ANALYSIS OF THE ANTI-TUMOR PROTEIN RICIN	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	02-83	2	BBCB	51,520	67,802
1 R01 GM30052-01A1 11940	POSNER, GARY H ASYMMETRIC SYNTHESIS OF PHYSIOLOGICALLY ACTIVE COMPOUNDS	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	08-83	2	MCHA	53,620	77,080
1 R01 GM30054-01 21750	SAVAGEAU, MICHAEL A ANALYSIS OF MOLECULAR NETWORKS AND CONTROL SYSTEMS	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	03-83	3	SSS	46,468	71,679
1 R01 GM30062-01 22300	NUCCITELLI, RICHARD L DEVELOPMENT AND MAINTENANCE OF EPITHELIAL CELL POLARITY	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	08-83	2	CBY	71,305	84,850
1 R01 GM30072-01 11840	BLAKE, JAMES J CHEMICAL SYNTHESIS OF PROTEINS	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	07-83	2	MCHA	55,558	70,948
1 R01 GM30073-01 11910	CHAMBERLIN, A RICHARD SYNTHESIS OF ALKALOIDS BY POLYENE CYCLIZATION	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	01-83	2	MCHA	44,832	58,435
1 R01 GM30077-01 21200	HAYES, SIDNEY ANALYSIS OF THE LAMBDA REPLICATOR	UNIVERSITY OF SASKATCHEWAN	SASKATOON	CANADA	82	01-83	2	MG	66,230	66,230
1 R01 GM30079-01 11920	JOHNSON, RICHARD W ENZYME MODELS BASED ON ANTIBODY-HAPTEN COMPLEXES	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	01-83	2	BNP	16,735	25,772

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1	R01 GM30081-01 11940	MIDLAND, M MARK STEREOSPECIFIC SYNTHESIS STEROID SIDE-CHAIN METABOLITES	UNIVERSITY OF CALIFORNIA RIVERSIDE	RIVERSIDE	CALIFORNIA	82	07-83	2	MCHA		48,308	66,472
1	R23 GM30086-01 13450	DAVIS, JOHN M IMPAIRED HOST DEFENSE MECHANISMS IN SHOCK	CORNELL UNIVERSITY MEDICAL CENTER	NEW YORK	NEW YORK	82	01-83	2	SAT		35,000	50,840
1	R01 GM30097-01 22400	WOODARD, RONALD W STEREOCHEMISTRY OF ACC SYNTHASE AND ACC DEAMINASE	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	01-83	2	BIO		53,096	79,104
1	R01 GM30105-01 AI 22550	HACKERT, MARVIN L STRUCTURE AND FUNCTION OF HISTIDINE DECARBOXYLASE	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	01-83	2	BBCB		52,300	67,105
1	R01 GM30114-01 22500	SEGAL, GERALD A CIRCULAR DICHROISM SPECTRA IN THE VACUUM ULTRAVIOLET	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	03-83	2	BBCA		37,360	54,546
1	R01 GM30115-01 22300	LIS, LEONARD J HIGH SENSITIVITY MICROCALORIMETRY OF LIPID MIXTURES	ILLINOIS INSTITUTE OF TECHNOLOGY	CHICAGO	ILLINOIS	82	08-83	2	BBCA		43,286	56,931
1	R01 GM30132-01 21700	ANDERSON, ROBERT P THE GENETIC SPECIFICATION OF NEMATODE MUSCLE	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	01-83	2	GEN		89,471	110,489
1	R01 GM30134-01 21750	ROSSI, JOHN J SYNTHETIC DNA IN STUDIES OF EUKARYOTIC GENE EXPRESSION	CITY OF HOPE NATIONAL MEDICAL CENTER	DUARTE	CALIFORNIA	82	01-83	2	GEN		70,000	109,613
1	R01 GM30135-01 21400	SMOUSE, PETER E GENETIC DEMOGRAPHY OF TRIBAL POPULATIONS	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	02-83	1	MGN		44,396	70,146
1	R01 GM30140-01 21800	WEAVER, STEVEN G THE MAINTENANCE OF SEQUENCE HOMOLOGY BY GENE CONVERSION	UNIVERSITY OF ILLINOIS CHICAGO CIRCLE	CHICAGO	ILLINOIS	82	01-83	2	MGN		65,048	94,753
1	R01 GM30141-01 11940	BARTLETT, PAUL A SYNTHESIS OF POLYETHER NATURAL PRODUCTS	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	01-83	4	MCHA		96,057	121,495
1	R01 GM30144-01 21800	BROWN, WESLEY M EVOLUTIONARY GENETICS OF MITOCHONDRIAL DNA	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	01-83	2	MGN		111,057	148,537

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1	R01 GM30147-01 22500	KEIDERLING, TIMOTHY A VIBRATIONAL OPTICAL ACTIVITY: BIOCHEMICAL APPLICATIONS	UNIVERSITY OF ILLINOIS CHICAGO CIRCLE	CHICAGO	ILLINOIS	82	01-83	2	BBCA		42,740	61,544
1	R01 GM30158-01 22300	SCHINDLER, MELVIN S BIODYNAMICS OF NUCLEAR MEMBRANE AND MATRIX	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	12-82	2	BBCA		60,250	79,172
1	R01 GM30160-01 NS 13200	STRICHARTZ, GARY R DIFFERENTIAL ANESTHESIA OF NERVE FIBERS	PETER BENT BRIGHAM HOSPITAL	BOSTON	MASSACHUSETTS	82	01-83	2	SAT		133,395	159,803
1	R01 GM30163-01 11850	SZOKA, FRANCIS C CONTROLLED DISPOSITION OF LIPOSOMES	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	01-83	2	PHRA		92,960	121,778
1	R01 GM30165-01A1 22550	TEETER, MARTHA M STRUCTURE/FUNCTION IN HEMOLYTIC TOXINS	BOSTON UNIVERSITY	BOSTON	MASSACHUSETTS	82	06-83	2	BBCB		51,780	86,716
1	R01 GM30174-01 22500	LANYI, JANOS TIME-RESOLVED INFRARED SPECTROSCOPY OF BACTERIORHODOPSIN	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	07-83	2	BBCA		82,728	102,371
1	R01 GM30178-01A1 22500	PRENDERGAST, FRANKLIN G BIOCHEMISTRY OF BIOLUMINESCENCE IN AEQUORIN	MAYO FOUNDATION	ROCHESTER	MINNESOTA	82	06-83	2	PB		43,850	51,642
1	R01 GM30179-01 22400	SCHULMAN, HOWARD CALCIUM AND CALMODULIN-DEPENDENT PROTEIN KINASES	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	01-83	2	PC		72,487	103,170
1	R01 GM30180-01 21600	EDGELL, MARSHALL H SEQUENCE ELEMENTS IN THE MOUSE	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	01-83	2	MGN		63,480	86,400
1	R01 GM30181-01 21750	STORTI, ROBERT V REGULATION OF EXPRESSION OF CLONED MUSCLE GENES	UNIVERSITY OF ILLINOIS MEDICAL CENTER	CHICAGO	ILLINOIS	82	01-83	2	GEN		30,705	48,207
1 2	R01 GM30183-01A1 21280	BOGORAD, LAWRENCE ORGANELLE GENES AND GENE REGULATION	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	07-83	2	GEN		78,981	116,501
1	R01 GM30186-01 21750	STRUHL, KEVIN EXPRESSION AND REGULATION OF THE YEAST HIS3 GENE	HARVARD UNIVERSITY	BOSTON	MASSACHUSETTS	82	02-83	2	GEN		85,000	118,184

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1	R01 GM30191-01 21200	SPICER, ELEANOR K STRUCTURE AND EXPRESSION OF T4 DNA REPLICATION GENES	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	03-83 45,500	2	MG 71,890	
1	R01 GM30195-01A1 22400	BELL, J ELLIS MECHANISM AND REGULATION OF GLUTAMATE DEHYDROGENASE	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	06-83 50,474	2	PB 72,232	
5	R01 GM30201-02 21800	DYKHUIZEN, DANIEL E GENETIC BASIS OF SELECTION IN NATURAL POPULATIONS	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	08-83 89,796	3	GEN 138,634	
1	R01 GM30204-01 21320	KELLEMS, RODNEY E REGULATION OF MRNA METABOLISM IN ANIMAL CELLS	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	02-83 92,796	2	MBY 114,429	
1	R01 GM30205-01 12820	LEONARD, EDWARD F TECHNOLOGY OF THERAPEUTIC MEMBRANE PLASMAPHERESIS	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	01-83 79,639	2	SB 124,256	
1	R01 GM30209-01 22250	BERLIN, RICHARD D SURFACE FUNCTIONS DURING MITOSIS	UNIVERSITY OF CONNECTICUT HEALTH CENTER	FARMINGTON	CONNECTICUT	82	01-83 95,860	4	CP 135,622	
1	R01 GM30211-01 22250	BARCLAY, STEPHEN L GENETIC ANALYSIS OF CYTOSKELETAL FUNCTIONS	UNIVERSITY OF ILLINOIS CHICAGO CIRCLE	CHICAGO	ILLINOIS	82	03-83 69,128	2	GEN 80,050	
1	R01 GM30213-01 22250	MC INTOSH, J RICHARD FUNCTIONS OF MITOTIC SPINDLE PROTEINS	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	03-83 67,571	2	CBY 91,694	
1	R01 GM30217-01 22400	VIOLA, RONALD E METAL ION AND SUBSTRATE SPECIFICITY OF L-ASPARTASE	SOUTHERN ILLINOIS UNIV AT EDWARDSVILLE	EDWARDSVILLE	ILLINOIS	82	03-83 48,666	2	PB 63,276	
1	R01 GM30218-01 22300	WEIGEL, PAUL H ENDOCYTOSIS AND RECYCLING OF THE GALACTOSYL RECEPTOR	UNIVERSITY OF TEXAS MED BR GALVESTON	GALVESTON	TEXAS	82	01-83 59,881	2	CP 79,089	
1	R01 GM30219-01 22300	GUSTAFSON, GARY L CONTROL OF INTRACELLULAR PROTEINASE COMPARTMENTATION	UNIVERSITY OF MONTANA	MISSOULA	MONTANA	82	12-82 57,150	2	CBY 79,013	
1	R01 GM30220-01 21750	DAHLBERG, JAMES E STRUCTURE, ORGANIZATION AND EXPRESSION OF SNRNA GENES	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	03-83 85,353	2	GEN 117,970	

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5	R01 GM30228-02 21320	POYTON, ROBERT O PATHWAYS OF PROTEIN TRANSPORT INTO CELL ORGANELLES	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	06-83	2	MBC		68,205	93,823
1	R01 GM30236-01 22200	RIGNEY, DAVID R COMPARISON OF SIBLING CELLS	INSTITUTE FOR CANCER RESEARCH	PHILADELPHIA	PENNSYLVANIA	82	01-83	2	CP		94,765	126,045
1	R01 GM30240-01 12840	COTTON, THERESE M SURFACE ENHANCED RAMAN STUDIES OF BIOMOLECULES	ILLINOIS INSTITUTE OF TECHNOLOGY	CHICAGO	ILLINOIS	82	01-83	2	BMT		122,340	136,028
1	R01 GM30243-01A1 22300	KRIEGER, MONTY GENETIC ANALYSIS OF RECEPTOR-MEDIATED ENDOCYTOSIS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	06-83	2	CTY		70,427	91,247
1	R01 GM30244-01 22300	SILBERT, DAVID F MEMBRANE LIPIDS-INTERACTIONS AND CONTROL OF BIOSYNTHESIS	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	01-83	3	CTY		92,209	136,324
1	R01 GM30245-01 22300	FISHER, PAUL A THE MOLECULAR BIOLOGY OF THE NUCLEAR ENVELOPE	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	01-83	2	CTY		92,259	130,502
1	R01 GM30248-01 21480	GROSS, KENNETH W ANDROGEN RESPONSIVE GENES OF MOUSE SUBMAXILLARY GLAND	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	01-83	2	MGN		73,387	106,306
1	R01 GM30249-01 21750	DUFFY, JOHN J REGULATION OF RNA POLYMERASE II SYNTHESIS	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	01-83	2	MBY		63,410	87,705
1	R01 GM30250-01 21400	EAVES, LINDON J RESOLVING POWER OF KINSHIP ANALYSIS FOR GENETIC RESEARCH	VIRGINIA COMMONWEALTH UNIVERSITY	RICHMOND	VIRGINIA	82	01-83	3	MGN		14,823	21,538
1	R01 GM30255-01A1 11910	COMINS, DANIEL L ALKALOID SYNTHESIS VIA 2-ALKENYL-1,2-DIHYDROPYRIDINES	UTAH STATE UNIVERSITY	LOGAN	UTAH	82	07-83	2	MCHA		29,828	39,393
9	R01 GM30267-04 CA 11930	WILSON, W DAVID INTERACTION OF ANTHRACYCLINE DRUGS WITH DNA	GEORGIA STATE UNIVERSITY	ATLANTA	GEORGIA	82	12-82	2	BBCA		32,250	44,326
1	R01 GM30270-01A1 21750	SCHOENBERG, DANIEL R ESTROGEN ACTION IN XENOPUS LIVER	U.S. UNIFORMED SERVICES UNIV OF HLTH SCI	BETHESDA	MARYLAND	82	06-83	2	BCE		42,038	42,038

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1	R23 GM30272-01 13450	MAIER, RONALD V CELLULAR MECHANISMS LPS-INDUCED INJURY	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	12-82	2	SAT		36,900	43,222
5	R01 GM30273-02 21600	ELGIN, SARAH C NONHISTONE CHROMOSOMAL PROTEINS	WASHINGTON UNIVERSITY OF DROSOPHILA	SAINT LOUIS	MISSOURI	82	06-83	3	GEN		120,542	186,840
1	R01 GM30282-01 22600	HASCHEMEYER, RUDY H BIOPHYSICAL FLUX METHODS: THEORY AND APPLICATIONS	CORNELL UNIVERSITY MEDICAL CENTER	NEW YORK	NEW YORK	82	01-83	2	BBCA		25,050	35,826
1	R01 GM30284-01 21100	HANLON, M SUE RAMAN SPECTRAL STUDIES OF DNA-AMINE COVALENT COMPLEXES	UNIVERSITY OF ILLINOIS MEDICAL CENTER	CHICAGO	ILLINOIS	82	07-83	1	BBCA		35,195	55,608
9	R01 GM30286-04 MH 11920	COWARD, JAMES K A MECHANISTIC STUDY OF BIOLOGICAL TRANSALKYLATION	RENSSELAER POLYTECHNIC INSTITUTE	TROY	NEW YORK	82	02-83	2	PB		72,129	105,809
1	P01 GM30287-01 NS 12840	SHULMAN, ROBERT G IN VIVO NMR STUDIES OF BRAIN, LIVER AND TUMORS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	01-83	2	SSS		637,778	746,022
1	R01 GM30293-01 11940	HOUK, KENDALL N STEREOSELECTIVITIES OF SYNTHETIC ORGANIC REACTIONS	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	01-83	2	MCHA		81,717	121,350
7	R01 GM30295-01 22250	CARRAWAY, KERMIT L MEMBRANE-CYTOSKELETON INTERACTIONS	UNIVERSITY OF MIAMI	MIAMI	FLORIDA	81	11-82	0	CBY		30,000	57,260
1	R01 GM30299-01 22300	ELSON, ELLIOT L BIOPHYSICAL STUDIES OF CELL SURFACE INTERACTIONS	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	01-83	2	MBY		71,895	106,254
1	R01 GM30301-01 11920	CANE, DAVID E STEREOCHEMICAL STUDIES OF ISOPRENOID BIOSYNTHESIS	BROWN UNIVERSITY	PROVIDENCE	RHODE ISLAND	82	12-82	2	MCHA		66,000	99,282
2	R01 GM30307-02 21750	HOLLAND, MICHAEL J CONTROL OF TRANSCRIPTION OF ISOLATED EUCARYOTIC GENES	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	04-83	4	GEN		61,746	80,887
1	R01 GM30308-01 22400	WILKINSON, KEITH D UBIQUITIN-DEPENDENT PROTEOLYSIS--SPECIFICITY/MECHANISM	EMORY UNIVERSITY	ATLANTA	GEORGIA	82	01-83	4	PC		70,614	92,171

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5	R01 GM30310-02 11930	DAVES, G DOYLE, JR PALLADIUM CATALYZED SYNTHESIS OF C-NUCLEOSIDES	LEHIGH UNIVERSITY	BETHLEHEM	PENNSYLVANIA	82	06-83	0	MCHA		49,448	83,567
1	R01 GM30312-01 13420	SPITZER, JUDY A ALTERED CA2+ HOMEOSTASIS & METABOLIC FUNCTIONS IN SEPSIS	LOUISIANA STATE UNIV MED CTR NEW ORLEANS	NEW ORLEANS	LOUISIANA	82	12-82	4	SAT		57,756	76,263
5	R01 GM30317-03 21750	KEY, JOE L RNA METABOLISM IN DEVELOPMENT AND HORMONAL REGULATION	UNIVERSITY OF GEORGIA	ATHENS	GEORGIA	82	07-83	3	PC		92,093	126,138
1	R01 GM30319-01A1 21600	SAUERBIER, WALTER TRANSCRIPTION OF UV-IRRADIATED DNA AND CHROMATIN	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	07-83	2	CTY		71,471	97,239
7	R01 GM30324-01 22300	JOHNSON, GARY L REGULATORY PROTEINS OF ADENYLATE CYCLASE	UNIVERSITY OF MASSACHUSETTS MEDICAL SCH	WORCESTER	MASSACHUSETTS	81	11-82	0	MBY		50,997	73,995
3	R01 GM30324-01S1 22300	JOHNSON, GARY L REGULATORY PROTEINS OF ADENYLATE CYCLASE	UNIVERSITY OF MASSACHUSETTS MEDICAL SCH	WORCESTER	MASSACHUSETTS	82	11-82	0	BIO	1	20,583	36,638
2	R01 GM30327-02 22400	TSAI, MING-DAW STEREOCHEMISTRY OF ENZYME REACTIONS TO PHOSPHOROUS	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	82	06-83	2	PB		52,309	67,593
1	R01 GM30330-01 21250	MARINUS, MARTIN G RELATIONSHIP OF THE DAM GENE AND DNA ADENINE METHYLASE	UNIVERSITY OF MASSACHUSETTS MEDICAL SCH	WORCESTER	MASSACHUSETTS	82	03-83	2	MG		61,890	101,468
1	R01 GM30331-01 HL 12840	ACKERMAN, JOSEPH J SURFACE COIL NMR BIOCHEMISTRY OF IN VIVO TISSUE	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	05-83	2	SSS		147,711	216,186
1	R01 GM30332-01 21600	WORCEL, ABRAHAM STRUCTURE OF INTERPHASE AND METAPHASE CHROMOSOMES	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	11-82	4	GEN		71,501	122,932
1	R01 GM30333-01 CA 21780	CHILDS, GEOFFREY J MOBILIZATION OF TANDEM REPETITIVE GENE FAMILIES	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	01-83	2	GEN		79,552	131,162
1	R01 GM30335-01 AI 11940	IRELAND, ROBERT E 3-ACYLTETRAMIC ACID ANTIBIOTIC SYNTHESIS	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	01-83	2	MCHA		51,000	70,680

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5	R13 GM30337-03 21700	HICKS, JAMES B BACTERIAL GENETICS	COLD SPRING HARBOR LABORATORY	COLD SPRING HARB	NEW YORK	82	04-83 30,735	0	GBD	30,735
5	R01 GM30338-02 21600	THOMAS, CHARLES A, JR MOLECULAR CYTOGENETICS	HELICON FOUNDATION	SAN DIEGO	CALIFORNIA	82	01-83 82,328	0	GEN	143,424
5	R01 GM30339-02 21600	WORCEL, ABRAHAM PROPERTIES OF DNA-PROTEIN COMPLEXES OF D.MELANOGASTER	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	11-82 56,256	0	CTY	96,418
7	R01 GM30340-01 21600	COHEN, EDWARD H ORGANIZATION AND EVOLUTION OF DROSOPHILA DNA	FRED HUTCHINSON CANCER RESEARCH CENTER	SEATTLE	WASHINGTON	81	12-82 38,796	0	GEN	45,658
5	R01 GM30341-02 22450	MC KEEHAN, WALLACE L OXOCARBOXYLIC ACIDS AND NAD PLUS/NADH IN CELL GROWTH	W. ALTON JONES CELL SCIENCE CENTER	LAKE PLACID	NEW YORK	82	12-82 52,009	0	CBY	90,132
1	R01 GM30343-01 CA 11910	STERNBACH, DANIEL D CHIRAL SYNTHESIS: METHYLENOMYCIN & PEDERIN	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	01-83 63,098	2	MCHA	86,098
1	R01 GM30345-01 CA 11910	BOECKMAN, ROBERT K, JR SYNTHESIS OF MEDIUM RING ANTITUMOR SUBSTANCES	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	08-83 43,555	3	BNP	72,826
1	R01 GM30347-01 21700	FRANKEL, JACK S ONTOGENETIC PATTERNS OF ENZYME LOCUS EXPRESSION	HOWARD UNIVERSITY	WASHINGTON	DIST OF COL	82	08-83 28,065	2	GEN	47,373
1	R01 GM30348-01 22250	HUANG, BESSIE P GENETIC STUDIES OF FLAGELLAR DYNEIN ARMS	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	02-83 105,295	2	GEN	136,257
2	R01 GM30349-02 21700	TIMBERLAKE, WILLIAM E REGULATION OF THE LACTASE GENE OF ASPERGILLUS	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	07-83 88,266	2	GEN	119,048
1	R01 GM30350-01 CA 11910	COLLUM, DAVID B THE SYNTHESIS OF ANTITUMOR AGENTS	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	01-83 65,150	3	MCHA	88,033
1	R01 GM30351-01 21800	HARTL, DANIEL L MEASURES OF POPULATION FITNESS IN DROSOPHILA	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	11-82 98,555	2	GEN	137,250

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7	R01 GM30352-01 11920	HOGGARD, PATRICK E LUMINESCENCE OF AMINO ACID AND PEPTIDE COMPLEXES	UNIVERSITY OF NORTH DAKOTA	GRAND FORKS	NORTH DAKOTA	81	09-82	0	BMT		33,551	41,504
5	R01 GM30354-02 11910	SNIDER, BARRY B PSEUDOMONIC ACID A TOTAL SYNTHESIS VIA NEIGHBORING GROUP	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	08-83	1	MCHA		44,594	80,269
2	R01 GM30355-02 11770	ROSS, ELLIOTT M EFFECT OF MEMBRANE STRUCTURE ON ADENYLATE CYCLASE	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	07-83	4	MBY		95,945	118,728
1	R01 GM30362-01 CA 11930	HANSCH, CORWIN H FUNDAMENTALS OF DRUG DESIGN	POMONA COLLEGE	CLAREMONT	CALIFORNIA	82	04-83	2	SSS		68,060	106,065
2	R01 GM30363-02 21600	JELINEK, WARREN R MOBILE DISPERSED REPEATS & THEIR RNAS IN MAMMALS	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82	07-83	2	MGN		116,367	163,497
5	R01 GM30365-08 22410	HIRSCHBERG, CARLOS B GLYCOSYLATION MECHANISMS OF CELL LIPIDS AND PROTEINS	ST. LOUIS UNIVERSITY	SAINT LOUIS	MISSOURI	82	07-83	3	MBY		77,391	113,087
1	R01 GM30367-01 11940	WHITESIDES, GEORGE M ENZYMES AS CATALYSTS IN ORGANIC SYNTHESIS	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	03-83	3	BNP		152,975	218,501
5	R01 GM30368-02 22400	AYLING, JUNE E OXYGEN ACTIVATION BY PHENYLALANINE HYDROXYLASE	UNIVERSITY OF SOUTH ALABAMA	MOBILE	ALABAMA	82	06-83	2	BIO		75,758	104,059
1	R01 GM30369-01 11940	STREITWIESER, ANDREW ION PAIR CARBON ACIDITY	UNIVERSITY OF CALIFORNIA	BERKELEY BERKELEY	CALIFORNIA	82	04-83	2	MCHA		57,605	74,021
1	R01 GM30373-01 11910	PEARSON, ANTHONY J STEROID, C-NOR-D-HOMOSTEROID, AND APHIDICOLIN SYNTHESES	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	82	07-83	2	MCHA		88,312	110,196
5	R01 GM30375-02 21310	MC CLURE, WILLIAM R MECHANISM AND REGULATION OF E COLI RNA POLYMERASE	CARNEGIE-MELLON UNIVERSITY	PITTSBURGH	PENNSYLVANIA	82	06-83	2	MG		59,430	88,487
3	R01 GM30375-02S1 21310	MC CLURE, WILLIAM R MECHANISM AND REGULATION OF E COLI RNA POLYMERASE	CARNEGIE-MELLON UNIVERSITY	PITTSBURGH	PENNSYLVANIA	82	06-83	2	MG		35,851	55,569

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5	R01 GM30376-02 22400	BEZANILLA, FRANCISCO J ELECTROPHYSIOLOGICAL STUDIES OF VOLTAGE GATED CHANNELS	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	07-83	3	PHY	71,610	95,970
5	R01 GM30377-02 22300	NONNER, WOLFGANG F MOLECULAR MECHANISMS OF GATING IN IONIC CHANNELS	UNIVERSITY OF MIAMI	MIAMI	FLORIDA	82	07-83	1	PHY	80,173	154,126
2	R01 GM30379-02 21600	CLARK, ROGER W EXTRA-CHROMOSOMAL BODIES-STRUCTURE AND REPLICATION	UNIVERSITY OF DENVER	DENVER	COLORADO	82	08-83	2	BBCA	67,749	94,836
5	R01 GM30380-02 22400	TAI, HSIN-HSIUNG ENZYMES IN PROSTAGLANDIN METABOLISM	UNIVERSITY OF KENTUCKY	LEXINGTON	KENTUCKY	82	08-83	0	BIO	37,346	55,048
1	R01 GM30385-01 22250	BORISY, GARY G MOLECULAR ANALYSIS OF MITOTIC SPINDLE COMPONENTS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	01-83	4	MBY	67,134	87,854
1	P01 GM30387-01 22300	SPUDICH, JAMES A MEMBRANE CHANNELS, RECEPTORS AND ANCHORS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	3	SSS	289,281	426,530
1	R01 GM30390-01 11910	TIUS, MARCUS A TOTAL SYNTHESIS OF (-) - ASPERDIOL	UNIVERSITY OF HAWAII AT MANOA	HONOLULU	HAWAII	82	05-83	2	MCHA	41,347	53,857
1	R01 GM30393-01 22600	SALEMME, FRANCIS R STRUCTURAL COOPERATIVITY IN PROTEINS	UNIVERSITY OF ARIZONA	TUCSON	ARIZONA	82	04-83	2	BBCA	41,360	52,050
5	R01 GM30395-02 21100	ITAKURA, KEIICHI PEPTIDE HORMONE PRODUCTION IN E COLI	CITY OF HOPE RESEARCH INSTITUTE	DUARTE	CALIFORNIA	82	05-83	1	MBC	63,940	105,565
7	R01 GM30399-01 21600	ROE, BRUCE A SEQUENCE ANALYSIS OF MAMMALIAN TRNA AND TRNA GENES	UNIVERSITY OF OKLAHOMA NORMAN	NORMAN	OKLAHOMA	81	08-83	0	PC	43,449	59,925
5	R01 GM30400-02 21320	ROE, BRUCE A THE ROLE OF MODIFIED NUCLEOTIDES IN MAMMALIAN TRNA	UNIVERSITY OF OKLAHOMA NORMAN	NORMAN	OKLAHOMA	82	08-83	0	PC	56,683	76,522
9	R01 GM30401-06 HD 22250	GIBBONS, IAN R PROPERTIES OF DYNEIN ISOENZYMES	UNIVERSITY OF HAWAII AT MANOA	HONOLULU	HAWAII	82	03-83	4	CBY	89,335	117,362

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1 2	R01 GM30405-01 21750	BRANDRISS, MARJORIE C GENETIC REGULATION OF PROLINE UTILIZATION	UNIVERSITY OF MEDICINE & DENTISTRY OF NJ	NEWARK	NEW JERSEY	82	05-83	2	GEN	66,387	105,245
1	R01 GM30407-01 13420	BAXTER, CHARLES R COMPOSITE GRAFTS IN THE TREATMENT OF THERMAL INJURY	UNIVERSITY OF TEXAS HLTH SCI CTR DALLAS	DALLAS	TEXAS	82	04-83	2	SAT	106,262	132,793
1	R01 GM30408-01 AI 21310	SONENSHEIN, ABRAHAM L INITIATION OF RNA SYNTHESIS	TUFTS UNIVERSITY	BOSTON	MASSACHUSETTS	82	04-83	2	MG	53,874	83,835
5	R01 GM30410-02 11770	ZIBOH, VINCENT A ROLE OF PROSTAGLANDINS IN HEMOPOIESIS	UNIVERSITY OF CALIFORNIA DAVIS	DAVIS	CALIFORNIA	82	07-83	0	HEM	49,850	68,195
1	R01 GM30415-01 21200	LINN, STUART M STUDIES OF DNA POLYMERASES	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	05-83	4	PC	82,160	106,380
1	R01 GM30416-01 22400	STARCHER, BARRY C ELASTIN TURNOVER	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	04-83	2	PBC	61,292	81,904
1	R01 GM30418-01 21320	UHLENBECK, OLKE C ANTICODON LOOP SUBSTITUTION IN TRNA	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	04-83	2	BBCA	54,134	73,313
1	R01 GM30419-01 12910	APFEL, ROBERT E CELL CHARACTERIZATION AND DEFORMATION WITH ULTRASOUND	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	04-83	2	RNM	56,961	83,934
7	R01 GM30425-01 22500	SILVER, FREDERICK H COLLAGEN FIBRILLOGENESIS--MOLECULAR AND CELLULAR STEPS	RUTGERS MEDICAL SCHOOL	PISCATAWAY	NEW JERSEY	81	02-83	0	PBC	20,399	33,760
1	R01 GM30428-01 AI 22400	SOKATCH, JOHN R BIOCHEMISTRY AND GENETICS OF LIPOAMIDE DEHYDROGENASE	UNIVERSITY OF OKLAHOMA HLTH SCIENCES CTR	OKLAHOMA CITY	OKLAHOMA	82	06-83	2	SSS	54,861	71,528
1	R13 GM30430-01 GM 21480	DAVIDSON, RICHARD L FASEB CONFERENCE ON SOMATIC CELL GENETICS	FEDERATION OF AMER SOC FOR EXPER BIO	BETHESDA	MARYLAND	82	05-83	0	GEN	2,000	2,000
5	R01 GM30432-02 22400	BLAKLEY, RAYMOND ALLOSTERIC REGULATION OF MONOMERIC ENZYMES	ST. JUDE CHILDREN'S RESEARCH HOSPITAL	MEMPHIS	TENNESSEE	82	08-83	1	BIO	68,901	95,566

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1	R13 GM30433-01 GM 21600	VAN HOLDE, KENSAL E GORDON RESEARCH CONFERENCE ON NUCLEOPROTEINS & CHROMATIN	UNIVERSITY OF RHODE ISLAND	KINGSTON	RHODE ISLAND	82	04-83 3,000	0	SSS	3,000
1	R01 GM30435-01 21200	TESSMAN, ETHEL S DNA REPLICATION IN E. COLI	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	07-83 67,346	2	MG	93,884
1	R01 GM30439-01 21600	KLEIN, HANNAH L GENETIC BEHAVIOR OF REPEATED SEQUENCES	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82	04-83 79,460	2	GEN	106,665
1	R01 GM30442-01 22200	PETERSEN, NANCY S SURVIVAL FROM HEAT SHOCK AS A SCREEN	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	CALIFORNIA	82	06-83 29,080	1	GEN	43,038
1	R01 GM30443-01 21320	PELLEGRINI, MARIA C STRUCTURE-FUNCTION RELATIONSHIPS IN RIBOSOMES	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	04-83 61,180	2	MBY	82,193
1	R01 GM30445-01 21600	RECHSTEINER, MARTIN C INJECTION OF CHROMATIN COMPONENTS INTO MAMMALIAN CELLS	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	04-83 50,393	4	CTY	72,395
1	R01 GM30450-01 22250	FORMAN, DAVID S PERMEABILIZED CELL MODEL OF SALTATORY ORGANELLE MOVEMENT	U.S. UNIFORMED SERVICES UNIV OF HLTH SCI	BETHESDA	MARYLAND	82	04-83 57,855	2	CBY	57,855
1	R01 GM30452-01 21100	ROSSKY, PETER J IONIC DISTRIBUTIONS IN POLYNUCLEOTIDE SOLUTIONS	UNIVERSITY OF TEXAS AUSTIN	AUSTIN	TEXAS	82	04-83 37,523	2	BBCA	50,656
1	R01 GM30454-01 21750	GUARENTE, LEONARD P GENETICS OF TRANSCRIPTION & TRANSLATION IN YEAST	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	04-83 65,253	2	GEN	90,804
1	R01 GM30461-01 22200	LO, CECILIA W GAP JUNCTIONAL COMMUNICATION IN DROSOPHILA IMAGINAL DISC	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	04-83 81,159	2	GEN	113,744
1	R01 GM30467-01 21480	BOTSTEIN, DAVID HUMAN DNA POLYMORPHISMS FOR GENETIC MAPPING	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	04-83 87,195	2	MGN	122,264
1	R01 GM30471-01 22410	PLUMMER, T H, JR CHARACTERIZATION OF PEPTIDE: N-GLYCOSIDASES	NEW YORK STATE DEPARTMENT OF HEALTH	ALBANY	NEW YORK	82	04-83 34,267	2	PC	34,267

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1	R01 GM30473-01 13410	SPATH, JAMES A, JR SEROTONIN AND OPIATE INTERACTIONS IN HEMORRHAGIC SHOCK	THOMAS JEFFERSON UNIVERSITY	PHILADELPHIA	PENNSYLVANIA	82	04-83	2	SAT		62,604	97,289
1	R01 GM30476-01 21480	DISTECHE, CHRISTINE M ISOLATION OF X- & 7-SPECIFIC DNA TO STUDY X INACTIVATION	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	04-83	2	MGN		85,627	99,960
5	R01 GM30480-02 22400	FREY, PERRY A NUCLEOTIDYL AND PHOSPHOTRANSFERASE STEREOCHEMISTRY	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	06-83	3	PB		71,236	99,462
1	R01 GM30481-01 12910	O'BRIEN, WILLIAM D, JR THEORETICAL ULTRASONIC DOSIMETRY	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	04-83	2	RNM		26,641	35,181
1	R01 GM30482-01 22400	WINGE, DENNIS R METAL CHELATION IN METALLOTHIONEIN	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	04-83	2	BMT		86,816	119,466
1	R01 GM30488-01 AI 21200	RADDING, CHARLES M BACTERIOPHAGE RECOMBINATION PROTEINS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	05-83	2	MG		46,928	71,536
1	R01 GM30491-01 21750	WILCOX, GARY L BIOCHEMICAL GENETICS OF BACTERIAL PLANT PATHOGENS	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	04-83	2	MG		65,754	83,098
1	R01 GM30498-01 21200	LOHMAN, TIMOTHY M DNA UNWINDING: THE ROLE OF E. COLI REP AND SSB PROTEINS	TEXAS AGRI AND MECH UNIV COLLEGE STATION	COLLEGE STATION	TEXAS	82	04-83	2	BBCA		67,104	79,106
1	R01 GM30500-01 22450	NJUS, DAVID L OXIDATION-REDUCTION REACTIONS IN CHROMAFFIN GRANULES	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	82	08-83	2	PB		30,720	42,882
1	R23 GM30502-01 13250	CROSBY, GREGORY J SPINAL CORD AND BRAIN LOCAL METABOLISM DURING ANESTHESIA	MASSACHUSETTS GENERAL HOSPITAL	BOSTON	MASSACHUSETTS	82	04-83	2	SAT		32,933	46,209
1	R13 GM30505-01 GM 22550	HENDRICKSON, WAYNE A GORDON CONFERENCE ON DIFFRACTION METHODS IN BIOLOGY	GORDON RESEARCH CONFERENCES	KINGSTON	RHODE ISLAND	82	04-83	0	BBCB		2,000	2,000
1	R13 GM30508-01 22500	HUDSON, BRUCE S THE 1982 BIOPOLYMERS GORDON CONFERENCE	GORDON RESEARCH CONFERENCES	KINGSTON	RHODE ISLAND	82	05-83	0	BBCB		2,000	2,000

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1	R01 GM30509-01 22400	LANDS, WILLIAM E PROSTAGLANDIN SYNTHASE--STRUCTURE AND FUNCTION	UNIVERSITY OF ILLINOIS MEDICAL CENTER	CHICAGO	ILLINOIS	82	04-83	2	PB	53,443	83,906
5	R01 GM30518-02 22600	HONIG, BARRY H COMPUTER STUDIES OF PROTEIN STRUCTURE AND FUNCTION	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	08-83	1	BBCA	52,580	89,228
5	R01 GM30521-02 12910	KREMKAU, FREDERICK W BIOMOLECULAR ABSORPTION OF ULTRASOUND	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	12-82	1	RNM	52,064	78,781
1	R01 GM30522-01 12910	ZAGZEBSKI, JAMES A ULTRASONIC SCATTER IN SOFT TISSUE PHANTOMS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	04-83	2	RNM	81,949	103,010
2	R01 GM30528-02 11940	SNIDER, BARRY B NEW CARBON-CARBON BOND FORMING REACTIONS OF ALKENES	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	02-83	2	MCHA	66,295	101,198
1	R13 GM30536-01 GM 21750	WATSON, JAMES D CONFERENCE ON HEAT SHOCK INDUCTION OF PROTEINS	COLD SPRING HARBOR LABORATORY	COLD SPRING HARB	NEW YORK	82	03-83	0	MBY	5,000	5,000
5	R01 GM30543-02 21100	DICKERSON, RICHARD E STRUCTURES AND INTERACTIONS OF DNA AND PROTEINS	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	08-83	1	BBCA	121,415	167,242
3	R01 GM30543-02S1 21100	DICKERSON, RICHARD E STRUCTURES AND INTERACTIONS OF DNA AND PROTEINS	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	08-83	1	BBCA	20,225	28,052
1	R01 GM30544-01 AI 13700	VAN DYKE, CRAIG BEHAVIORAL CONDITIONING IN AUTOIMMUNE DISEASES	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	07-83	2	BPO	37,025	44,754
1	R01 GM30546-01 AM 11880	JOLLOW, DAVID J ACETAMINOPHEN TOXICITY: EFFECTS OF DIABETES AND DIET	MEDICAL UNIVERSITY OF SOUTH CAROLINA	CHARLESTON	SOUTH CAROLINA	82	04-83	2	PHRA	64,266	83,289
5	R01 GM30547-02 21750	CALVET, JAMES P PATTERNS OF GENE TRANSCRIPTION IN HE LA CELLS	UNIVERSITY OF KANSAS COL HLTH SCI & HOSP	KANSAS CITY	KANSAS	82	07-83	0	MBY	52,413	69,585
1	R01 GM30549-01 AI 22400	SILVERMAN, PHILIP ISOLEUCINE AND VALINE SYNTHESIS IN CPX MUTANTS OF E COLI	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	04-83	2	MG	64,978	116,318

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1	R01 GM30551-01 22550	SUDDATH, FRED L, JR HIGH RESOLUTION STRUCTURE OF PISUM SATIVUM LECTIN	UNIVERSITY OF ALABAMA IN BIRMINGHAM	BIRMINGHAM	ALABAMA	82	04-83	2	BBCB	29,150	39,586
1	R01 GM30552-01 22450	SMITH, JERRY C MOLECULAR PROBES OF CHARGE SEPARATION IN MEMBRANES	GEORGIA STATE UNIVERSITY	ATLANTA	GEORGIA	82	04-83	2	PB	47,413	66,558
7	R01 GM30553-01 21200	JOHNSON, PAUL H RESTRICTION ENDONUCLEASE MECHANISMS AND DNA STRUCTURE	SRI INTERNATIONAL	MENLO PARK	CALIFORNIA	82	12-82	0	BBCA	76,189	149,187
1	R01 GM30554-01 22400	CHAU, VINCENT MECHANISM OF ENZYME REGULATION BY CALMODULIN	UNIVERSITY OF FLORIDA	GAINESVILLE	FLORIDA	82	06-83	2	BIO 1	55,102	72,244
1	R01 GM30556-01 22500	BROWN, LARRY R STRUCTURE & DYNAMICS OF PROTEIN-LIPID COMPLEXES BY NMR	MICHIGAN MOLECULAR INSTITUTE	MIDLAND	MICHIGAN	82	04-83	2	BBCB	49,818	86,202
1	R01 GM30560-01 22500	GROSS, ELIZABETH L CHEMICAL MODIFICATION OF PLASTOCYANIN	OHIO STATE UNIVERSITY	COLUMBUS	OHIO	82	04-83	2	BBCA	56,580	73,452
1	R01 GM30561-01 22500	CRIPPEN, GORDON M CONFORMATIONAL ANALYSIS BY ENERGY EMBEDDING	TEXAS AGRI AND MECH UNIV	COLLEGE STATION	TEXAS	82	04-83	2	BBCA	41,250	53,213
1	R01 GM30562-01 21100	GERLT, JOHN A 31P AND 170 NMR STUDIES OF OLIGONUCLEOTIDE CONFORMATION	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	08-83	2	BBCA	43,059	70,299
1	R01 GM30564-01 CA 22600	HAGLER, ARNOLD T A DYNAMIC SIMULATION OF LIGAND BINDING TO DHF-REDUCTASE	AGOURON INSTITUTE	LA JOLLA	CALIFORNIA	82	04-83	2	BBCA	94,420	140,404
1	R13 GM30579-01 GM 21320	MATHEWS, MICHAEL B RNA PROCESSING MEETINGS	COLD SPRING HARBOR LABORATORY	COLD SPRING HARB	NEW YORK	82	03-83	0	SSS	5,000	5,000
1	R01 GM30580-01 22500	LEVY, RONALD M NMR RELAXATION AND DYNAMICS OF PEPTIDES AND PROTEINS	RUTGERS THE STATE UNIV NEW BRUNSWICK	NEW BRUNSWICK	NEW JERSEY	82	05-83	2	BBCB	36,364	57,455
1	R01 GM30588-01 21320	JACOBSON, LEWIS A BIOCHEMISTRY OF TRANSLATION CONTROL IN E COLI	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	03-83	1	MBC	35,079	50,460

TABLE-1 RESEARCH GRANTS ACTIVE AS OF 09-30-82 BY GRANT NUMBER

T	GRANT NUMBER / PROGRAM (FINE CODE)	INVESTIGATOR / PROJECT TITLE	GRANTEE INSTITUTION	CITY	STATE	FY	END-DATE	FUT-YRS AVAILABLE	IRG SUB	DOLLARS DIRECT	DOLLARS TOTAL
1	R01 GM30590-01 21250	BEATTIE, KENNETH L THE ENZYMOLOGY OF MUTAGENESIS	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	04-83	4	MG	62,202	81,535
1	R01 GM30593-01 12910	GOSS, STEPHEN A NONLINEAR ULTRASOUND PROPAGATION IN BIOLOGICAL TISSUE	INDIANAPOLIS CENTER FOR ADVANCED RES	INDIANAPOLIS	INDIANA	82	06-83	2	RHM	35,172	62,703
1	R01 GM30598-01 22250	TAYLOR, KENNETH A ELECTRON MICROSCOPE STUDIES ON MUSCLE	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	04-83	2	BBCB	61,188	86,568
1	R01 GM30600-01 21600	MUSICH, PHILLIP R SPECIFIC DNA-PROTEIN COMPLEXES IN GENOME ORGANIZATION	EAST TENNESSEE STATE UNIVERSITY	JOHNSON CITY	TENNESSEE	82	04-83	2	MBY	63,346	84,406
7	R01 GM30602-01 21200	SCOTT, JOHN F THE ENZYMOLOGY OF DNA REPLICATION IN YEAST	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	81	07-83	0	MBY	61,108	87,561
5	R01 GM30603-02 22250	BRETSCHER, ANTHONY P MICROFILAMENT ORGANIZATION AND MEMBRANE ATTACHMENT	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	08-83	0	CBY	41,003	56,764
1	R01 GM30604-01 12840	WILKINS, CHARLES L HIGH FIELD FT MASS SPECTROMETRY FOR BIOMOLECULES	UNIVERSITY OF CALIFORNIA RIVERSIDE	RIVERSIDE	CALIFORNIA	82	05-83	2	SSS	329,287	356,883
1	R01 GM30605-01 12840	STANDING, KENNETH G TIME-OF-FLIGHT MASS SPECTROMETRY OF LARGE BIOMOLECULES	UNIVERSITY OF MANITOBA	WINNIPEG	CANADA	82	05-83	2	SSS	59,068	59,068
1	R01 GM30607-01 21310	HOUGH, PAUL V IN VITRO TRANSCRIPTION BY RNA POLYMERASE II	ASSOCIATED UNIV-BROOKHAVEN NATL LAB	UPTON	NEW YORK	82	04-83	2	CTY	58,195	93,112
1	R01 GM30619-01 21780	ERREDE, BEVERLY J REGULATION OF GENE EXPRESSION BY TRANSPOSABLE ELEMENTS	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	06-83	2	GEN	75,300	95,778
7	R01 GM30626-01 22250	WITMAN, GEORGE B, III MOLECULAR MECHANISM OF FLAGELLA MOTILITY AND ASSEMBLY	WORCESTER FDN FOR EXPER BIOLOGY	SHREWSBURY	MASSACHUSETTS	81	11-82	0	MBY	60,065	94,121
1	R01 GM30636-01 AI 21750	JONES, NICHOLAS C THE MECHANISM AND REGULATION OF RNA SPLICING	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	04-83	2	EVR	57,000	76,600

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1	R01 GM30637-01 21750	KORNBERG, THOMAS B MOLECULAR MECHANISMS IN DEVELOPMENT	UNIVERSITY OF CALIFORNIA	SAN FRANCISCO SAN FRANCISCO	CALIFORNIA	82	02-83	2	MBY	85,909	112,386
1	R01 GM30638-01 21400	MARKOW, THERESE A GENETICS OF SEXUAL SELECTION	ARIZONA STATE UNIVERSITY	TEMPE	ARIZONA	82	04-83	2	GEN	28,742	43,400
1	R01 GM30647-01 22200	LENHOFF, HOWARD M MODEL FOR BASEMENT MEMBRANE-EPITHELIAL CELL INTERACTIONS	UNIVERSITY OF CALIFORNIA	IRVINE IRVINE	CALIFORNIA	82	04-83	2	CBY	62,241	75,878
1	R01 GM30649-01 21250	SHORTLE, DAVID R SITE/SPECIFIC MUTAGENESIS OF CLONED GENES	STATE UNIVERSITY NEW YORK	STONY BROOK STONY BROOK	NEW YORK	82	04-83	2	MG	56,915	78,527
9	R01 GM30657-04A1 HL 22300	HALL, JAMES E VOLTAGE-DEPENDENT CONDUCTANCE IN MEMBRANES	UNIVERSITY OF CALIFORNIA	IRVINE IRVINE	CALIFORNIA	82	03-83	2	PHY	59,176	71,631
1	R01 GM30666-01 22300	POO, MU-MING BIOPHYSICAL STUDIES OF PROTEIN DIFFUSION IN MEMBRANES	UNIVERSITY OF CALIFORNIA	IRVINE IRVINE	CALIFORNIA	82	04-83	2	CTY	112,714	133,705
1	R01 GM30667-01 22300	HERTZBERG, ELLIOT L PROBES FOR THE STUDY OF GAP JUNCTIONAL COMMUNICATION	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	04-83	2	CBY	87,306	101,276
1	R01 GM30679-01 21320	LOFTFIELD, ROBERT B HOW POLYAMINES ENHANCE PRECISION OF AA-TRNA SYNTHESIS	UNIVERSITY OF NEW MEXICO	ALBUQUERQUE ALBUQUERQUE	NEW MEXICO	82	03-83	2	PC	73,820	100,501
1	R01 GM30688-01 22400	KEIZER, JOEL E MECHANISTIC NONEQUILIBRIUM THERMODYNAMICS OF METABOLISM	UNIVERSITY OF CALIFORNIA	DAVIS DAVIS	CALIFORNIA	82	06-83	2	BBCA	33,250	45,486
1	R01 GM30693-01 21750	FIRTEL, RICHARD A ANALYSIS OF DEVELOPMENTALLY REGULATED GENES	UNIVERSITY OF CALIFORNIA	SAN DIEGO LA JOLLA	CALIFORNIA	82	03-83	4	GEN	81,396	102,948
1	R01 GM30696-01 11940	KELLY, T ROSS HETEROCYCLIC SYNTHESIS: RUBROLONE AND OTHER PYRIDINES	BOSTON COLLEGE	CHESTNUT HILL	MASSACHUSETTS	82	04-83	2	MCHA	72,755	102,036
1	R01 GM30700-01 21320	WELLS, BARBARA D SPECTROSCOPIC STUDIES OF SOLUTION CONFORMATIONS OF TRNA	UNIVERSITY OF WISCONSIN	MILWAUKEE MILWAUKEE	WISCONSIN	82	04-83	2	BBCA	76,391	94,611

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1	R01 GM30701-01 ES 11760	ADESNIK, MILTON B STRUCTURE AND REGULATION OF CYTOCHROME P-450 GENES	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82	01-83	2	MGN	104,919	151,028
1	R01 GM30702-01 21700	MEYER, BARBARA J ANALYSIS OF NEMATODE SEX DETERMINATION	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	08-83	2	GEN	101,638	126,242
1	R01 GM30703-01 13200	OHNISHI, S TSUYOSHI EFFECT OF ANESTHETICS ON CARDIAC SARCOPLASMIC RETICULUM	HAHNEMANN MED COL & HOSP OF PHILADELPHIA	PHILADELPHIA	PENNSYLVANIA	82	04-83	2	SAT	48,804	72,079
1	R01 GM30707-01 21750	HALVORSON, HARLYN O ORGANIZATION & REGULATION OF INVERTASE STRUCTURAL GENE	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	04-83	2	BIO	68,676	110,635
1	R01 GM30709-01 AI 21750	SADLER, JOHN R DETERMINANTS OF SPECIFICITY IN THE LACTOSE REPRESSOR	UNIVERSITY OF COLORADO HLTH SCIENCES CTR	DENVER	COLORADO	82	04-83	2	MG	71,091	88,298
1	R01 GM30719-01 MH 12200	KRONAUER, RICHARD E MATHEMATICAL MODELING OF HUMAN CIRCADIAN RHYTHMS	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	04-83	2	SSS	28,800	44,352
5	R01 GM30720-02 13410	REESE, ANDY C CIG FUNCTION: INTERACTION WITH FREE MACROPHAGES	MEDICAL COLLEGE OF GEORGIA	AUGUSTA	GEORGIA	82	07-83	0	EI	56,168	80,320
7	R01 GM30721-01 22450	YU, CHANG-AN REACTION MECHANISMS OF MYOCARDIAL UBIQUINONE-PROTEINS	OKLAHOMA STATE UNIVERSITY STILLWATER	STILLWATER	OKLAHOMA	81	02-83	0	BIO	90,341	116,022
1	R01 GM30726-01 21280	CHUA, NAM-HAI GENE STRUCTURE AND REGULATION	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	04-83	4	GEN	94,227	137,108
1	R01 GM30729-01 22400	BYNG, GRAHAM S ENZYMIC INTERFACE BETWEEN PRIMARY & SECONDARY METABOLISM	STATE UNIVERSITY NEW YORK BINGHAMTON	BINGHAMTON	NEW YORK	82	04-83	2	CP	41,395	59,558
2	R01 GM30731-02 AI 21780	ROWND, ROBERT H THE CONTROL OF THE REPLICATION OF BACTERIAL EPISOMES	NORTHWESTERN UNIVERSITY	CHICAGO	ILLINOIS	82	08-83	4	MBY	153,000	225,480
1	R01 GM30735-01 11940	HOUSE, HERBERT O SPECIAL STRUCTURAL FEATURES TO CONTROL REACTIONS	GEORGIA INSTITUTE OF TECHNOLOGY	ATLANTA	GEORGIA	82	05-83	2	MCHA	62,298	94,967

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1	R01 GM30738-01 11940	SCHREIBER, STUART L THE UTILITY OF PEROXIDES IN ORGANIC SYNTHESIS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82 71,693	04-83	2	MCHA	106,315
1	R01 GM30741-01 12840	ASHER, SANFORD A UV RESONANCE RAMAN STUDIES OF PROTEIN STRUCTURE	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82 109,175	05-83	2	BBCB	129,026
1	R01 GM30743-01 CA 11940	DE SHONG, PHILIP R NITRONE CYCLOADDITIONS/THE SYNTHESIS OF AMINO SUGARS	PENNSYLVANIA STATE UNIVERSITY UNIV PARK	UNIVERSITY PARK	PENNSYLVANIA	82 75,065	08-83	2	MCHA	90,929
1	R13 GM30753-01 GM 11920	ZUBIETA, JON A CONFERENCE ON COPPER COORDINATION CHEMISTRY	STATE UNIVERSITY OF NEW YORK AT ALBANY	ALBANY	NEW YORK	82 2,000	03-83	0	BMT	2,000
5	R01 GM30754-02 22300	GUNN, ROBERT B MECHANISMS AND CELLULAR FUNCTIONS OF ION TRANSPORTS	EMORY UNIVERSITY	ATLANTA	GEORGIA	82 77,469	08-83	0	PHY	115,104
5	R01 GM30755-02 13420	KOCHEVAR, IRENE E ULTRAVIOLET LIGHT INDUCED PHENOMENA IN BIOMEMBRANES	MASSACHUSETTS GENERAL HOSPITAL	BOSTON	MASSACHUSETTS	82 72,915	07-83	0	GMA	103,590
1	R01 GM30756-01 CA 21700	O'FARRELL, PATRICK CELLULAR DETERMINANTS OF DEVELOPMENTAL STATE	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82 75,853	04-83	2	CTY	97,644
1	R01 GM30758-01 CA 22200	SLUDER, GREENFIELD RNA IN FORMATION, FUNCTION & REPRODUCTION OF CENTROSOME	WORCESTER FDN FOR EXPER BIOLOGY	SHREWSBURY	MASSACHUSETTS	82 66,575	04-83	2	MBY	99,831
9	R01 GM30759-08 CA 11910	BARTLETT, PAUL A SYNTHESIS OF MACROCYCLIC NATURAL PRODUCTS	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82 81,738	03-83	4	MCHA	102,489
5	R01 GM30760-02 21750	ZIFF, EDWARD B ADENOVIRUS-2 MESSENGER RNA SYNTHESIS STRUCTURAL STUDIES	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82 83,865	08-83	3	VR	123,893
1	R01 GM30771-01 CA 11910	RIGBY, JAMES H TOTAL SYNTHESIS OF SOME CYTOTOXIC GUAIANOLIDES	WAYNE STATE UNIVERSITY	DETROIT	MICHIGAN	82 43,670	04-83	2	MCHA	59,356
5	R01 GM30777-02 13700	WOLF, GEORGE BRAIN LESIONS AND SALT APPETITE: A NEUROBEHAVIORAL SYSTE	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82 48,628	04-83	1	BPO	71,729

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1	R01 GM30781-01 21310	HEARST, JOHN E THE STRUCTURE OF RNA POLYMERASE TERNARY COMPLEXES	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	07-83	2	BBCA		8,150	11,565
1	R01 GM30786-01 21750	HEARST, JOHN E DIFFERENTIATION & GENETICS OF A PHOTOSYNTHETIC MEMBRANE	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	07-83	2	MBC		70,000	99,330
1	R01 GM30787-01 11940	BERSON, JEROME A MECHANISTIC BASES OF SYNTHETIC STRATEGY	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	08-83	2	MCHA		62,955	100,324
1	R01 GM30789-01 21100	AUSTIN, ROBERT H TRIPLET ANISOTROPY DECAY STUDIES OF DNA MOTION	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	06-83	2	BBCA		44,662	68,766
1	R13 GM30792-01 GM 22300	SILVERSTEIN, SAMUEL C LYSOSOMES IN THE REGULATION OF CYTOPLASMIC FUNCTION	GORDON RESEARCH CONFERENCES	KINGSTON	RHODE ISLAND	82	05-83	0	CBY		3,000	3,000
7	R01 GM30793-01 22600	HAGLER, ARNOLD T WALTER IN BIOLOGICAL SYSTEM-MOLECULAR RECGONITON	AGOURON INSTITUTE	LA JOLLA	CALIFORNIA	82	12-82	1	BBCA		39,050	58,602
5	R01 GM30799-02 13200	BLANCK, THOMAS J J ANESTHETIC DEPRESSION OF THE MYOCARDIUM	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	04- 3	3	SAT		1,621	58,632
1	R01 GM30800-01 21320	MILLER, DAVID L STRUCTURE & FUNCTION OF PEPTIDE CHAIN ELONGATION FACTOR	INSTITUTE FOR BASIC RES IN DEV DISABIL	NEW YORK	NEW ORK	82	08-83	3	MG		6 ,576	89,885
1	R01 GM30814-01 22250	MURRAY, JOHN M STUDY OF MEMBRANE-CYTOSKELETON COMPLEXES	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	06-83	2	CTY		82,867	114,822
1	R01 GM30816-01 21780	POTTER, STANLEY S EUCARYOTIC TRANSPOSABLE GENETIC ELEMENTS	WESLEYAN UNIVERSITY	MIDDLETOWN	CONNECTICUT	82	06-83	2	GEN		73,000	102,028
7	R01 GM30819-01 22300	FREIRE, ERNESTO STATISTICAL THERMODYNAMIC STUDIES OF MEMBRANES	UNIVERSITY OF TENNESSEE KNOXVILLE	KNOXVILLE	TENNESSEE	82	12-82	0	BBCB		27,150	35,620
1	R01 GM30820-01 HL 13200	CHRISTIAN, CHARLES, II ANESTHESIA AND THE CARDIOVASCULAR SYSTEM	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	07-83	2	SAT		92,058	127,155

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1	R01 GM30823-01 22300	DRICKAMER, KURT STRUCTURE OF RECEPTORS FOR ENDOCYTOSIS OF GLYCOPROTEINS	UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	01-83	2	CP	86,325	124,275
1	R01 GM30830-01 22550	SARMA, RAGHUPATHY STRUCTURE OF A SPECIFIC BACTERIAL PROTEIN	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	06-83	1	BBCB	29,003	41,395
1	R01 GM30838-01 NS 12350	ROSCOE, DENNIS D MYOELECTRIC CONTROLLER FOR ORTHOTIC/PROSTHETIC SYSTEMS	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	82	08-83	2	ORTH	74,243	97,569
1	R01 GM30840-01 ES 11750	ZAKIM, DAVID METABOLISM OF DRUGS, TOXINS, & ENVIRONMENTAL POLLUTANTS	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	07-83	2	PHRA	63,634	77,017
1	R01 GM30859-01 11940	OVERMAN, LARRY E GENERAL METHODS FOR SYNTHESIS OF BIOACTIVE AZACYCLICS	UNIVERSITY OF CALIFORNIA IRVINE	IRVINE	CALIFORNIA	82	07-83	2	MCHA	59,319	81,032
1	R01 GM30861-01 22200	WATTERSON, DANIEL M MOLECULAR BASIS OF CALCIUM ACTION IN CELL PROCESSES	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	03-83	2	CP	53,800	83,121
1	R01 GM30864-01 AI 21600	DANIELL, ELLEN CHROMATIN PROTEINS: EFFECT ON TRANSCRIPTION IN VITRO	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	06-83	1	EVR	38,610	54,788
1	R01 GM30868-01 22400	DANIELS, LACY CARBON AND ELECTRON TRANSFER IN BACTERIAL METHANOGENESIS	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	06-83	2	MBC	79,041	97,297
1	R01 GM30870-01 21700	BLUMENTHAL, THOMAS DEVELOPMENTALLY REGULATED GENES OF C. ELEGANS	INDIANA UNIVERSITY BLOOMINGTON	BLOOMINGTON	INDIANA	82	08-83	4	GEN	121,600	167,343
1	R01 GM30875-01 11940	COLLUM, DAVID B ASSISTED ELECTROPHILIC OPENING OF CYCLOPROPANES	CORNELL UNIVERSITY ITHACA	ITHACA	NEW YORK	82	08-83	2	MCHA	63,680	89,042
1	R01 GM30881-01 21320	YARUS, MICHAEL J TRNA STRUCTURE/FUNCTION STUDIES VIA GENE CONSTRUCTION	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	06-83	4	PC	155,506	210,890
1	R01 GM30884-01 22400	REINHART, GREGORY D MECHANISM OF ALLOSTERIC INFLUENCE ON ENZYME ACTIVITY	MAYO FOUNDATION	ROCHESTER	MINNESOTA	82	07-83	2	BIO 1	48,992	62,519

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1	R01 GM30885-01 22400	MATTHEWS, ROWENA G FOLYLPOLYGLUTAMATES AND FOLATE-DEPENDENT ENZYMES	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	06-83	2	BIO	1	32,700	48,621
1	R01 GM30890-01 12910	GREEN, PHILIP S ORTHOGRAPHIC ULTRASONIC TRANSMISSION IMAGING	SRI INTERNATIONAL	MENLO PARK	CALIFORNIA	82	07-83	2	RHM		43,865	84,994
1	R01 GM30891-01 11760	COCHRANE, BRUCE J INDUCTION OF CYTOCHROME P-450'S IN DROSOPHILA	UNIVERSITY OF SOUTH FLORIDA	TAMPA	FLORIDA	82	07-83	2	MBY		37,434	51,735
1	R01 GM30892-01 21200	JONES, PETER A DNA METHYLATION AND DEMETHYLATION IN CYCLING CELLS	CHILDREN'S HOSPITAL OF LOS ANGELES	LOS ANGELES	CALIFORNIA	82	06-83	2	MBY		67,430	96,441
1	R01 GM30894-01 21100	TAKEDA, YOSHINORI STUDY ON CRO REPRESSOR--OPERATOR INTERACTION	UNIVERSITY OF MARYLAND BALT CO CAMPUS	CATONSVILLE	MARYLAND	82	06-83	2	MG		58,848	68,548
1	R01 GM30896-01 21750	WILCOX, GARY L MOLECULAR BASIS OF CONTROL IN THE L-ARABINOSE OPERON	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	07-83	4	MG		80,000	109,838
1	R01 GM30900-01 22500	NOZAKI, YASUHIKO DETERMINATION OF THE CONCENTRATION OF BIOPOLYMERS	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	06-83	1	BBCA		49,853	71,797
1	R01 GM30902-01 22550	KARLE, ISABELLA L X-RAY DIFFRACTION STUDIES OF OLIGOPEPTIDES	U.S. NAVAL RESEARCH LABORATORY	WASHINGTON	DIST OF COL	82	07-83	2	BBCA		53,550	53,550
1	R01 GM30904-01 22500	SIIMAN, OLAVI SURFACE-ENHANCED RAMAN SCATTERING	CLARKSON COLLEGE OF TECHNOLOGY	POTSDAM	NEW YORK	82	06-83	2	BMT		35,894	51,780
1	R01 GM30910-01 ES 22400	ARMSTRONG, RICHARD N MECHANISM OF ACTION OF GULUTATHIONE S-TRANSFERASE	UNIVERSITY OF MARYLAND COLLEGE PK CAMPUS	COLLEGE PARK	MARYLAND	82	06-83	2	PB		65,447	87,698
1	R01 GM30911-01 22400	PETTIGREW, DONALD W ASSEMBLY AND CATALYSIS IN REGULATORY ENZYMES	TEXAS AGRI AND MECH UNIV COLLEGE STATION	COLLEGE STATION	TEXAS	82	08-83	2	PB		52,527	64,512
9	R01 GM30932-07 CA 11910	CUSHMAN, MARK S NEW ALKALOID SYNTHESES	PURDUE UNIVERSITY WEST LAFAYETTE	WEST LAFAYETTE	INDIANA	82	06-83	2	MCHA		54,316	74,966

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1	R01 GM30938-01 11940	DENMARK, SCOTT E INTRAMOLECULAR NITROSOALKENE-OLEFIN CYCLOADDITIONS	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	07-83	2	MCHA		36,748	50,336
1	R01 GM30943-01 AI 22400	ORME-JOHNSON, WILLIAM H ENZYMES AND REGULATORY PROTEINS OF DINITROGEN REDUCTION	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	06-83	3	SSS	1	161,704	208,723
1	R01 GM30948-01 21780	ENGELS, WILLIAM R BEHAVIOR OF P FACTORS: MOVABLE ELEMENTS IN DROSOPHILA	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	06-83	2	GEN		55,000	75,640
7	R01 GM30952-01 22410	HORST, MICHAEL N CHITIN BIOSYNTHESIS IN A NON-FUNGAL SYSTEM	MERCER UNIVERSITY MACON	MACON	GEORGIA	82	11-82	2	PBC		23,716	31,263
1	R01 GM30953-01 22400	WATTERSON, DANIEL M CA2+ DEPENDENT PROTEIN PHOSPHORYLATION: MOLECULAR BASIS	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	08-83	2	BIO		58,897	90,204
1	R01 GM30959-01 21800	ADAMS, JULIAN P EVOLUTION IN YEAST: GENE DUPLICATION AND DIVERGENCE	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	07-83	2	GEN		56,130	83,741
1	R01 GM30962-01 21700	LONG, SHARON R EARLY GENE EXPRESSION IN THE RHIZOBIUM-LEGUME SYMBIOSIS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	2	MG		82,038	115,120
1	R01 GM30969-01 22300	HUI, SEK-WEN MECHANISM OF POLYETHYLENE GLYCOL INDUCED MEMBRANE FUSION	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	06-83	2	BBCB		33,172	46,520
1	R01 GM30975-01 22450	SCOTT, ROBERT A ELECTROSTATIC EFFECTS IN CYTOCHROME C ELECTRON TRANSFER	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	06-83	2	PB		50,150	65,435
1	R01 GM30982-01 22200	GOODENOUGH, URSULA W FERTILIZATION MECHANISMS IN CHLAMYDOMONAS	WASHINGTON UNIVERSITY	SAINT LOUIS	MISSOURI	82	06-83	2	CTY		37,887	58,725
1	R01 GM30997-01 21700	CHALFIE, MARTIN GENETIC ANALYSIS OF NEMATODE CELL DIFFERENTIATION	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	07-83	2	GEN		91,922	121,142
1	R01 GM30998-01 21800	LI, WEN-HSIUNG STATISTICAL STUDIES OF DNA EVOLUTION	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	06-83	2	GEN		24,564	33,898

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1	R01 GM31001-01 11760	JOHNSON, ERIC F CYTOCHROME P-450 POLYMORPHISM	SCRIPPS CLINIC AND RESEARCH FOUNDATION	LA JOLLA	CALIFORNIA	82	07-83	2	PB	82,236	131,973
1	R01 GM31003-01 22250	TELZER, BRUCE R CELL DIVISION: ANALYSIS OF THE MITOTIC APPARATUS	POMONA COLLEGE	CLAREMONT	CALIFORNIA	82	06-83	2	CBY	62,755	81,633
1	R01 GM31004-01 CA 22200	TSIEN, ROGER Y ROLE OF INTRACELLULAR FREE CALCIUM IN CELL PROLIFERATION	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	06-83	2	CP	82,040	100,043
1	R01 GM31005-01 22250	ZIEVE, GARY W MITOSIS SPECIFIC CHANGES IN THE MAMMALIAN CYTOSKELETON	STATE UNIVERSITY NEW YORK STONY BROOK	STONY BROOK	NEW YORK	82	08-83	2	CBY	64,751	89,563
1	R01 GM31006-01 21700	PRINGLE, JOHN R GENETIC STUDY OF THE YEAST CELL CYCLE	UNIVERSITY OF MICHIGAN AT ANN ARBOR	ANN ARBOR	MICHIGAN	82	06-83	2	GEN	70,129	106,342
1	R01 GM31013-01 11940	MOLANDER, GARY A STEREOSPECIFIC SYNTHESES VIA ALLYLMETALLATION REACTIONS	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	07-83	2	BMT	50,267	66,441
1	R01 GM31023-01 21700	LATEN, HOWARD M CYTOKININ FUNCTION AND SYNTHESIS IN YEAST	LOYOLA UNIVERSITY OF CHICAGO	CHICAGO	ILLINOIS	82	08-83	2	MBC	52,724	72,492
1	R01 GM31030-01 21780	SIGNER, ETHAN R MOLECULAR GENETICS OF RHIZOBIUM NODULATION PLASMIDS	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	06-83	2	GEN	73,658	105,484
1	R01 GM31039-01 22300	COHEN, FREDRIC S ION TRANSPORT AND PHYSIOLOGY OF A-ADRENERGIC STIMULATION	RUSH-PRESBYTERIAN-ST LUKES MEDICAL CTR	CHICAGO	ILLINOIS	82	06-83	2	PHY	75,700	93,520
1	R01 GM31041-01 22250	SCHLIWA, MANFRED INTRACELLULAR ORGANELLE TRANSPORT	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	06-83	2	CBY	72,228	90,760
1	R01 GM31048-01 22200	LIN, JIM J GOLI-ASSOCIATED, HEAT-SHOCK PROTEIN	COLD SPRING HARBOR LABORATORY	COLD SPRING HARB	NEW YORK	82	08-83	2	CBY	57,069	101,640
1	R01 GM31051-01 11910	WALBA, DAVID M TOTAL SYNTHESES OF ZOAPATANOL AND EUNICELLINS	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	07-83	2	MCHA	42,999	58,131

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7	R01 GM31056-01 21480	KLEBE, ROBERT J SOMATIC CELL GENETICS OF DIFFERENTIATED PHENOTYPES	UNIVERSITY OF TEXAS HLTH SCI CTR SAN ANT	SAN ANTONIO	TEXAS	81	11-82 9,329	0	MGN	9,329
1	R01 GM31060-01 21750	NISHIKURA, KAZUKO ROLE OF RNA PROCESSING IN CELL DIFFERENTIATION	WISTAR INSTITUTE OF ANATOMY AND BIOLOGY	PHILADELPHIA	PENNSYLVANIA	82	07-83 80,000	2	CTY	124,400
1	R01 GM31066-01 13410	GROSSMAN, JEFFREY E CRYOPRECIPITATE THERAPY OF CRITICALLY ILL PATIENTS	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	07-83 42,934	1	SAT	61,396
.	R01 GM31073-01 21310	WEINER, ALAN M TRANSCRIPTION AND FUNCTION OF HUMAN SMALL NUCLEAR RNAS	YALE UNIVERSITY	NEW HAVEN	CONNECTICUT	82	06-83 56,987	2	MBY	94,888
1	R01 GM31074-01 22300	DEGNAN, KEVIN J PHYSIOLOGY OF CHLORIDE SECRETION	BROWN UNIVERSITY	PROVIDENCE	RHODE ISLAND	82	06-83 70,961	2	PHY	101,356
1	R01 GM31076-01 21250	DEIBEL, MARTIN R, JR TERMINAL TRANSFERASE ENZYMATIC AND ACTIVE SITE STUDIES	UNIVERSITY OF KENTUCKY	LEXINGTON	KENTUCKY	82	06-83 51,596	2	BIO 1	74,908
1	R01 GM31078-01 13410	MC INTOSH, TRACY K ENDORPHIN AND CATECHOLAMINE RESPONSE TO SHOCK AND TRAUMA	BOSTON UNIVERSITY	BOSTON	MASSACHUSETTS	82	06-83 45,533	2	SAT	81,777
5	R01 GM31080-02 13410	MESCHER, ANTHONY LOUIS INJURY-INDUCED GROWTH AND MYELIN-DERIVED GROWTH FACTORS	INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS	INDIANAPOLIS	INDIANA	82	05-83 27,872	0	CBY	39,123
1	R01 GM31082-01 21250	AZIZ, SANCAR STRUCTURE AND REGULATION OF E. COLI DNA PHOTOLYASE	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	CHAPEL HILL	NORTH CAROLINA	82	07-83 98,609	2	MG	124,740
1	R01 GM31083-01 22300	MURPHY, ALEXANDER J SARCOPLASMIC RETICULUM ATPASE--STRUCTURE AND MECHANISM	UNIVERSITY OF THE PACIFIC	SAN FRANCISCO	CALIFORNIA	82	08-83 57,180	2	PB	78,380
1	R01 GM31086-01 22450	GARLID, KEITH D ION TRANSPORT MECHANISMS IN MITOCHONDRIA	MEDICAL COLLEGE OF OHIO AT TOLEDO	TOLEDO	OHIO	82	06-83 86,830	2	PB	117,831
1	R01 GM31088-01 12910	FORSTER, FRED K ULTRASONIC ASSESSMENT OF WOUND HEALING AND BURN TRAUMA	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	07-83 111,422	2	RHM	141,363

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1	R01 GM31093-01 21780	BURR, BENJAMIN TRANSPOSABLE GENETIC ELEMENTS OF MAIZE	ASSOCIATED UNIV-BROOKHAVEN NATL LAB	UPTON	NEW YORK	82	07-83	1	GEN		80,255	126,218
1	R13 GM31095-01 GM 21600	ROEDER, ROBERT G 1982 GORDON RESEARCH CONFERENCE	GORDON RESEARCH CONFERENCES ON NUCLEIC ACIDS	KINGSTON	RHODE ISLAND	82	05-83	0	MGN		2,000	2,000
1	R01 GM31098-01 22200	NELSON, DAVID L CALMODULIN IN TRICHOCYST ASSEMBLY AND STRUCTURE	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	06-83	2	BIO	1	58,264	80,380
1	R01 GM31099-01 AM 22400	LOWENSTEIN, JOHN M FUNCTION AND CONTROL OF EXTRAMITOCHONDRIAL B-OXIDATION	BRANDEIS UNIVERSITY	WALTHAM	MASSACHUSETTS	82	06-83	4	PB		86,613	146,662
1	R01 GM31104-01 NS 21700	GREENSPAN, RALPH J DEVELOPMENTAL GENETICS OF NERVOUS SYSTEM IN DROSOPHILA	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	06-83	2	GEN		83,726	117,471
1	R01 GM31105-01 21750	RINE, JASPER D ANALYSIS OF THE GENES CONTROLLING A POSITION EFFECT	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	06-83	2	GEN		82,935	104,849
1	R01 GM31106-01 21600	LIM, JOHNG K DNA REARRANGEMENTS IN DROSOPHILA CHROMOSOMES	UNIVERSITY OF WISCONSIN EAU CLAIRE	EAU CLAIRE	WISCONSIN	82	08-83	2	GEN		115,000	116,739
1	R01 GM31107-01 21750	CRAIG, ELIZABETH A REGULATION AND FUNCTION OF THE YEAST HEAT SHOCK RESPONSE	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	06-83	2	GEN		71,711	94,648
1	R01 GM31110-01 21400	GROSSMAN, LAWRENCE DNA REPAIR GENE EXPRESSION IN MAMMALIAN CELLS	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	06-83	4	BIO	1	89,795	134,363
1	R01 GM31114-01 AM 21320	VOURNAKIS, JOHN N SECONDARY STRUCTURE AND PROCESSING OF PROKARYOTIC RNA	SYRACUSE UNIVERSITY AT SYRACUSE	SYRACUSE	NEW YORK	82	06-83	2	MG		45,249	70,191
1	R01 GM31124-01 11940	SHARPLESS, K BARRY SYNTHESIS OF SACCHARIDES AND PALYTOXIN	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	07-83	2	BNP		93,070	132,761
1	R01 GM31125-01 21750	VOELLMY, RICHARD W MECHANISM OF REGULATION OF HEAT-SHOCK GENE EXPRESSION	UNIVERSITY OF MIAMI	MIAMI	FLORIDA	82	06-83	2	GEN		90,000	131,897

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5	R13 GM31136-04 22300	GROSS, PAUL R PHYSIOLOGY AND MOLECULAR BIOLOGY	MARINE BIOLOGICAL LABORATORY	WOODS HOLE	MASSACHUSETTS	82	12-82	1	CMBD		95,933	95,933
1	R01 GM31137-01 21750	CASHMORE, ANTHONY R SEQUENCES ENCODING THE SMALL SUBUNIT OF RUBP CARBOXYLASE	ROCKEFELLER UNIVERSITY	NEW YORK	NEW YORK	82	07-83	2	MBY		62,529	94,451
1 3	R01 GM31138-01 21750	LEE, AMY SHIU HISTONE GENE EXPRESSION IN THE MAMMALIAN CELL CYCLE	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	08-83	2	MBY		65,837	93,576
1	R01 GM31139-01 21250	PTASHNE, MARK DNA-PROTEIN BINDING AND SITE-SPECIFIC MUTAGENESIS	HARVARD UNIVERSITY	CAMBRIDGE	MASSACHUSETTS	82	06-83	2	MG		51,534	91,811
1	R23 GM31144-01 13250	LYNCH, CARL, III CALCIUM CURRENT DEPRESSION BY VOLATILE ANESTHETICS	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	07-83	2	SAT		28,126	40,783
1	R01 GM31145-01 22500	WEISS, RICHARD L 15N-NUCLEAR MAGNETIC RESONANCE IN BIOLOGY	UNIVERSITY OF CALIFORNIA LOS ANGELES	LOS ANGELES	CALIFORNIA	82	06-83	2	PB		58,053	79,359
1	R01 GM31150-01 13410	HEIMBACH, DAVID M EFFECTS OF MULTIPLE TRANSFUSIONS IN TRAUMA AND BURNS	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	07-83	2	SAT		51,595	68,933
1	R01 GM31155-01 HL 11770	WOLFE, BARRY B REGULATION OF MUSCARINIC CHOLINERGIC RECEPTORS	UNIVERSITY OF PENNSYLVANIA	PHILADELPHIA	PENNSYLVANIA	82	07-83	2	PHRA		61,719	92,216
1	R01 GM31159-01 21750	SILFLOW, CAROLYN D CHARACTERIZATION AND EXPRESSION OF TUBULIN GENES	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	06-83	2	MBY		61,756	79,601
1	R01 GM31168-01 22300	AUGUST, J THOMAS PURIFICATION OF CELL SURFACE DIFFERENTIATION ANTIGENS	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	06-83	4	CBY		122,000	183,000
1	R01 GM31178-01 21750	HARALSON, MICHAEL A THE BIOSYNTHESIS AND REGULATION OF TYPE V PROCOLLAGEN	VANDERBILT UNIVERSITY	NASHVILLE	TENNESSEE	82	07-83	3	PBC		63,421	93,987
1	R01 GM31181-01 21700	DIMOND, RANDALL L 2-MANNOSIDASE REGULATION DURING SLIME MOLD DEVELOPMENT	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	06-83	2	MBY		49,474	67,308

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1	R01 GM31184-01 CA 22200	SANDO, JULIANNE J CELLULAR MECHANISM OF ACTION OF PHORBOL ESTER PROMOTERS	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	06-83	2	PBC	54,171	69,526
1	R01 GM31186-01 22400	MARKHAM, GEORGE D ENZYMATIC MECHANISMS OF SULFUR-NUCLEOSIDE BIOSYNTHESIS	INSTITUTE FOR CANCER RESEARCH	PHILADELPHIA	PENNSYLVANIA	82	06-83	2	BIO 1	55,284	78,214
1	R01 GM31191-01 AM 22300	THOMPSON, STEPHEN M ELECTROPHYSIOLOGY OF PROTON TRANSPORT BY EPITHELIA	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	06-83	2	PHY	49,393	59,800
1	R01 GM31193-01 22400	SOBERMAN, ROY J PURIFICATION AND CONTROL OF THE HUMAN 5-LIPOXYGENASE	ROBERT BRECK BRIGHAM HOSPITAL	BOSTON	MASSACHUSETTS	82	06-83	2	BIO 2	42,190	59,855
1	R01 GM31196-01 21200	MEYER, RALPH R E. COLI MUTANT DNA BINDING PROTEINS AND DNA METABOLISM	UNIVERSITY OF CINCINNATI	CINCINNATI	OHIO	82	08-83	2	MG	63,067	84,176
1	R01 GM31198-01 HD 22250	KUBAI, DONNA F EVOLUTION OF CHROMOSOME MOVEMENT	DUKE UNIVERSITY	DURHAM	NORTH CAROLINA	82	07-83	4	CBY	42,313	55,970
1	R01 GM31199-01 NS 13700	ALBERS, H ELLIOTT NEURAL AND HORMONAL CONTROL OF CIRCADIAN BEHAVIORS	WORCESTER FDN FOR EXPER BIOLOGY	SHREWSBURY	MASSACHUSETTS	82	07-83	2	BPO	44,256	64,029
1	R01 GM31202-01 12930	MC GRATH, JOHN J OSMOSIS AND FREEZING IN LARGE UNILAMELLAR LIPOSOMES	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	07-83	2	CBY	76,421	91,706
1	R01 GM31206-01 11770	HOFFMAN, BRIAN B ALPHA2 RECEPTOR MEDIATED INHIBITION OF ADENYLATE CYCLASE	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	07-83	2	PHRA	101,646	137,865
1	R01 GM31212-01 22550	PETSKO, GREGORY A STRUCTURE AND REACTION OF IRON SUPEROXIDE DISMUTASE	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	06-83	2	BBCB	15,420	23,104
1	R01 GM31213-01 21200	BARTON, JACQUELINE K ROLE OF ZINC IN A DNA ENZYME	HUNTER COLLEGE	NEW YORK	NEW YORK	82	06-83	2	BMT	72,484	95,669
1	R01 GM31215-01 21100	SHINER, CHRISTOPHER S A NEW CLASS OF CHIRAL BORANES; SYNTHESIS OF RIFAMYCINS	UNIVERSITY OF COLORADO AT BOULDER	BOULDER	COLORADO	82	08-83	2	MCHA	44,385	60,511

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1	R01 GM31218-01 21750	SKLAR, JEFFREY L TRANSCRIPTION OF HUMAN GLOBIN GENES IN DNA VECTORS	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	2	MBY		63,050	89,582
1	R01 GM31219-01 21310	WEIL, PETER A MOLECULAR CONTROL OF EUCARYOTIC TRANSCRIPTION	UNIVERSITY OF IOWA	IOWA CITY	IOWA	82	06-83	2	GEN		63,854	88,119
1	R01 GM31225-01 21320	OKARMA, THOMAS B RNA PROCESSING BY THE EXTRACTABLE NUCLEAR ANTIGEN	STANFORD UNIVERSITY	STANFORD	CALIFORNIA	82	06-83	2	BIO	1	71,322	112,689
1	R01 GM31226-01 21700	CHUNG, STEPHEN S CELL-CELL CONTACT REGULATED GENES IN DICTYOSTELIUM	UNIVERSITY OF ILLINOIS MEDICAL CENTER	CHICAGO	ILLINOIS	82	06-83	2	CTY		59,036	93,277
1	R01 GM31229-01 22250	PENNINGROTH, STEPHEN M ATP-DEPENDENT CONTROL MECHANISMS IN FLAGELLAR MOTILITY	RUTGERS MEDICAL SCHOOL	PISCATAWAY	NEW JERSEY	82	06-83	2	MBY		36,819	58,446
1	R01 GM31241-01 22500	PRENDERGAST, FRANKLYN G BIOPHYSICAL MECHANISMS IN MELITTIN INDUCED CYTOLYSIS	MAYO FOUNDATION	ROCHESTER	MINNESOTA	82	06-83	2	BBCB		59,038	75,677
5	R01 GM31244-02 22300	KEENAN, THOMAS W ENDOMEMBRANE INTERCONVERSION IN MILK FORMATION	VIRGINIA POLYTECHNIC INST AND ST UNIV	BLACKSBURG	VIRGINIA	82	08-83	1	CBY		74,102	109,671
1	R01 GM31247-01 21200	BENBOW, ROBERT M DNA RECOMBINASE FROM OVARIES OF THE FROG, XENOPUS LAEVIS	JOHNS HOPKINS UNIVERSITY	BALTIMORE	MARYLAND	82	06-83	2	MBY		28,799	43,199
1	R01 GM31249-01 21200	INMAN, ROSS B REPLICATION OF DNA IN EUCARYOTES	UNIVERSITY OF WISCONSIN MADISON	MADISON	WISCONSIN	82	06-83	2	GEN		58,383	82,284
1	R13 GM31250-01 GM 21320	BOTSTEIN, DAVID GORDON CONFERENCE ON BIOLOGICAL REGULATORY MECHANISMS	GORDON RESEARCH CONFERENCES	KINGSTON	RHODE ISLAND	82	05-83	0	CTY		2,000	2,000
1	R01 GM31253-01 21200	SUBRAMANI, SURESH MECHANISMS FOR GENETIC RECOMBINATION IN MAMMALIAN CELLS	UNIVERSITY OF CALIFORNIA SAN DIEGO	LA JOLLA	CALIFORNIA	82	06-83	2	EVR		65,967	82,837
9	R01 GM31256-06 CA 11910	SCHLESSINGER, RICHARD H TOTAL SYNTHESIS OF QUASSINOIDS	UNIVERSITY OF ROCHESTER	ROCHESTER	NEW YORK	82	03-83	2	MCHA		92,993	141,946

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5	R01 GM31257-02 11920	TSAI, CHUN-CHE BINDING OF DRUGS TO NUCLEIC ACIDS	KENT STATE UNIVERSITY AT KENT	KENT	OHIO	82	12-82	1	BBCA	42,228	56,520
1	R01 GM31259-01 21600	ITAKURA, KEIICHI ISOLATION OF NUCLEIC ACIDS USING SYNTHETIC DNA AS PROBE	CITY OF HOPE RESEARCH INSTITUTE	DUARTE	CALIFORNIA	82	07-83	2	PC	79,750	121,577
5	R01 GM31260-02 21480	DE FRANCESCO, LAURA RECOMBINATION IN MITOCHONDRIAL GENOME OF ANIMAL CELLS	CITY OF HOPE RESEARCH INSTITUTE	DUARTE	CALIFORNIA	82	11-83	0	MGN	32,365	53,435
2	R01 GM31261-02 21750	WALLACE, R BRUCE MAJOR HISTOCOMPATIBILITY COMPLEX GENE SEQUENCES	CITY OF HOPE RESEARCH INSTITUTE	DUARTE	CALIFORNIA	82	03-83	4	MGN	114,928	179,916
2	R01 GM31262-02 22200	KLEVECZ, ROBERT R TIMING OF MAMMALIAN CELL CYCLE EVENTS	CITY OF HOPE RESEARCH INSTITUTE	DUARTE	CALIFORNIA	82	11-82	3	SSS	106,136	139,420
2	R01 GM31263-02 21600	RIGGS, ARTHUR D REGULATORY PROTEINS IN E COLI AND EUKARYOTIC CELLS	CITY OF HOPE RESEARCH INSTITUTE	DUARTE	CALIFORNIA	82	11-82	4	MGN	135,978	221,245
1	R01 GM31265-01 22410	HERSCOVICS, ANNETTE A MANNOPROTEIN BIOSYNTHESIS IN SACCHAROMYCES CEREVISIAE	MC GILL UNIVERSITY	MONTREAL	CANADA	82	04-83	2	PBC	46,094	46,094
1	R01 GM31276-01 CA 21750	WOLD, WILLIAM S ADENOVIRUS EXPRESSION VECTOR	ST. LOUIS UNIVERSITY	SAINT LOUIS	MISSOURI	82	07-83	2	VR	44,018	63,437
7	R01 GM31280-01 11940	GLADYSZ, JOHN A ASYMMETRIC SYNTHESIS USING CHIRAL RHENIUM COMPLEXES	UNIVERSITY OF UTAH	SALT LAKE CITY	UTAH	82	06-83	0	BMT	28,432	39,066
1	R01 GM31281-01 21700	NADAL-GINARD, BERNARDO MYOSIN HEAVY CHAIN EXPRESSION IN A MUSCLE CELL LINE	YESHIVA UNIVERSITY	NEW YORK	NEW YORK	82	06-83	4	MBY	103,385	146,818
1	R01 GM31289-01 11790	FOX, JAY W CHARACTERIZATION & INHIBITION OF SNAKE HEMORRHAGIC TOXIN	UNIVERSITY OF VIRGINIA CHARLOTTESVILLE	CHARLOTTESVILLE	VIRGINIA	82	07-83	2	TOX	35,900	44,990
1	R01 GM31296-01 11760	MASTERS, BETTIE SUE PROSTAGLANDIN 19- AND 20-HYDROXYLATION BY CYTOCHROME P-4	MEDICAL COLLEGE OF WISCONSIN	MILWAUKEE	WISCONSIN	82	05-83	2	PB	52,904	70,014

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7	R01 GM31305-01 22500	WOLD, FINN PROTEIN STRUCTURE AND FUNCTION	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	HOUSTON	TEXAS	82	11-82	1	BIO		52,389	72,297
7	R01 GM31307-01 21750	ABELSON, JOHN N STRUCTURE AND FUNCTION OF RIBONUCLEIC ACIDS	AGOURON INSTITUTE	LA JOLLA	CALIFORNIA	82	11-82	4	BIO		140,674	205,211
7	R01 GM31311-01 21700	HEREFORD, LYNNA M THE YEAST CELL CYCLE	SIDNEY FARBER CANCER INSTITUTE	BOSTON	MASSACHUSETTS	82	11-82	0	GEN		37,000	59,436
9	R01 GM31352-04 AI 11910	SEMMELHACK, MARTIN F NATURAL PRODUCT SYNTHESES	PRINCETON UNIVERSITY	PRINCETON	NEW JERSEY	82	03-83	2	MCHA		75,924	124,515
7	R01 GM31367-01 22300	KOHLER, HEINZ STRUCTURE OF THE MAJOR RED CELL MEMBRANE POLYPEPTIDE	ROSWELL PARK MEMORIAL INSTITUTE	BUFFALO	NEW YORK	82	03-83	0	PC		66,335	94,470
1	R01 GM31373-01 22200	KENDE, HANS J SITE OF ACTION OF CYTOKININS	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	06-83	1	CP		29,242	41,231
9	R01 GM31452-04 21200	YOUNG, CHARLES S THE MECHANISMS OF ADENOVIRUS RECOMBINATION	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	04-83	2	VR		64,565	104,493
1	R01 GM31454-01 22400	TAI, HSIN-HSIUNG ENZYMES IN PROSTAGLANDIN METABOLISM	UNIVERSITY OF KENTUCKY	LEXINGTON	KENTUCKY	82	04-83	1	BIO		24,860	34,555
7	R01 GM31506-01 22300	BENTZ, JOSEPH E MEMBRANE FUSION	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	03-83	1	BBCB		40,495	53,048
1	R01 GM31528-01 21320	NILSEN, TIMOTHY W 2',5'-OLIGO(A) AND NUCLEAR RNA METABOLISM	CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OHIO	82	07-83	2	MBY		42,991	62,186
7	R01 GM31568-01 11750	AMIDON, GORDON L DRUG ABSORPTION THROUGH MEMBRANE METABOLISM	UNIVERSITY OF KANSAS LAWRENCE	LAWRENCE	KANSAS	82	06-83	0	PHRA		36,034	45,695
7	R01 GM31600-01 11910	SCOTT, A IAN ANTITUMOR ALKALOIDS BIOSYNTHESIS AND BIOGENETIC SYNTHESI	TEXAS AGRI AND MECH UNIV COLLEGE STATION	COLLEGE STATION	TEXAS	82	03-83	3	BNP		49,328	63,358

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							DIRECT		DOLLARS	TOTAL
9	R01 GM31616-04 21100	KIM, SUNG-HOU CRYSTALLINE COMPLEXES OF DNA WITH OTHER MOLECULES	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	06-83 46,242	4	BBCA 64,779	
7	R01 GM31617-01 22250	INOUE, SHINYA MITOSIS AND RELATED MOTILITY DIRECTLY IN LIVING CELLS	MARINE BIOLOGICAL LABORATORY	WOODS HOLE	MASSACHUSETTS	82	03-83 209,114	3	CBY 227,226	
7	R01 GM31655-01 21200	COZZARELLI, NICHOLAS R RNA LIGASE FUNCTION AND USE IN DNA SYNTHESIS	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	02-83 29,000	1	PBC 41,151	
1	R01 GM31656-01 21700	PAIGEN, KENNETH STUDIES OF MAMMALIAN GENE REGULATION	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	04-83 278,743	1	SSS 364,719	
7	R01 GM31657-01 21200	COZZARELLI, NICHOLAS R ENZYMOLOGICAL AND GENETIC STUDIES OF DNA POLYMERASES	UNIVERSITY OF CALIFORNIA BERKELEY	BERKELEY	CALIFORNIA	82	06-83 91,378	2	MG 129,665	
1	R01 GM31659-01 11770	LEWIS, JAMES A MUTANTS OF AN APPARENT ACETYLCHOLINE RECEPTOR	UNIVERSITY OF MISSOURI COLUMBIA	COLUMBIA	MISSOURI	82	06-83 38,410	2	GEN 47,465	
7	R01 GM31662-01 13410	DEMLING, ROBERT H PATHOPHYSIOLOGY OF LUNGS AFTER THERMAL INJURY	BETH ISRAEL HOSPITAL	BOSTON	MASSACHUSETTS	82	06-83 105,065	1	SAT 152,350	
7	R01 GM31664-01 13420	LIU, MAW-SHUNG HEPATIC GLUCOSE METABOLISM IN SHOCK	ST. LOUIS UNIVERSITY	SAINT LOUIS	MISSOURI	82	03-83 53,183	0	SAT 79,775	
7	R01 GM31672-01 22400	ADES, IBRAHIM Z BIOGENESIS OF CHICK LIVER AMINOLEVULINATE SYNTHETASE	UNIVERSITY OF MARYLAND COLLEGE PK CAMPUS	COLLEGE PARK	MARYLAND	82	03-83 25,700	0	BIO 36,928	
1	R01 GM31674-01 21100	EDEN, DON STRUCTURE AND ENVIRONMENT OF NUCLEIC ACIDS IN SOLUTION	SAN FRANCISCO STATE UNIVERSITY	SAN FRANCISCO	CALIFORNIA	82	06-83 82,019	2	BBCA 100,201	
1	R01 GM31685-01 21200	KHAN, SALEEM A PLASMID PT181 DNA REPLICATION IN STAPHYLOCOCCUS AUREUS	UNIVERSITY OF PITTSBURGH	PITTSBURGH	PENNSYLVANIA	82	06-83 73,501	2	MG 105,812	
7	R01 GM31686-01 22400	COOK, PAUL F KINETIC AND CHEMICAL MECHANISMS OF ENZYMES	TEXAS COLLEGE OF OSTEOPATHIC MEDICINE	FORT WORTH	TEXAS	82	06-83 33,000	2	PB 39,075	

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7	R01 GM31693-01 21200	SMITH, GERALD R MOLECULAR ANALYSIS OF HOSTSPOTS OF GENETIC RECOMBINATION	FRED HUTCHINSON CANCER RESEARCH CENTER	SEATTLE	WASHINGTON	82	12-82	2	VR	25,568	28,756
7	R01 GM31696-01 21750	MEARS, JOHN G REGULATION OF HUMAN GLOBIN GENE EXPRESSION	COLUMBIA UNIVERSITY	NEW YORK	NEW YORK	82	06-83	0	MBY	74,308	125,404
1	R01 GM31698-01 22410	STURMAN, LAWRENCE S CORONAVIRUS GLYCOPROTEINS AND GLYCOSAMINOGLYCANS	NEW YORK STATE DEPARTMENT OF HEALTH	ALBANY	NEW YORK	82	06-83	2	EVR	70,424	93,764
1	R01 GM31704-01 22400	JORNS, MARILYN S FLAVOENZYME MECHANISMS: REDOX AND NON-REDOX REACTIONS	HAHNEMANN MED COL & HOSP OF PHILADELPHIA	PHILADELPHIA	PENNSYLVANIA	82	07-83	2	PB	48,455	75,105
1	R01 GM31707-01 22300	SCHINDLER, MELVIN S LATERAL MOBILITY IN THE OUTER MEMBRANE OF BACTERIA	MICHIGAN STATE UNIVERSITY	EAST LANSING	MICHIGAN	82	07-83	2	MBC	58,600	70,490
1	R01 GM31708-01 22400	STORM, DANIEL R CALMODULIN REGULATION OF B PERTUSSIS ADENYLATE CYCLASE	UNIVERSITY OF WASHINGTON	SEATTLE	WASHINGTON	82	08-83	2	MBC	70,979	89,332
9	R01 GM31709-16 22300	MINDICH, LEONARD E CELL MEMBRANE SYNTHESIS IN THE CONTROL OF GROWTH	PUBLIC HLTH RES INST OF THE CITY OF NY	NEW YORK	NEW YORK	82	07-83	4	MBC	120,910	168,161
1	R01 GM31716-01 22400	MC KENNA, CHARLES E BIOORGANIC STUDIES OF NITROGENASE	UNIVERSITY OF SOUTHERN CALIFORNIA	LOS ANGELES	CALIFORNIA	82	06-83	2	SSS	99,710	132,442
7	R01 GM31733-01 22400	JARRETT, HARRY W STRUCTURE-FUNCTION RELATIONSHIPS INVOLVING CALMODULIN	INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS	INDIANAPOLIS	INDIANA	82	02-83	2	CTY	28,707	37,006
1	R01 GM31740-01 21400	COWAN, NICHOLAS J STRUCTURE AND EXPRESSION OF HUMAN TUBULIN GENES	NEW YORK UNIVERSITY	NEW YORK	NEW YORK	82	08-83	2	MGN	90,871	128,279
7	R01 GM31756-01 22450	SLIGAR, STEPHEN G HEME PROTEIN REDUCTASES	UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN	URBANA	ILLINOIS	82	07-83	3	PB	81,263	114,616
7	R01 GM31780-01 11890	SPEEG, KERMIT V HEPATIC, CEREBRAL AND RENAL SIDE EFFECTS OF CIMETIDINE	UNIVERSITY OF TEXAS HLTH SCI CTR SAN ANT	SAN ANTONIO	TEXAS	82	01-83	1	PHRA	58,163	79,102

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1	R01 GM31788-01 21250	BHANOT, OPINDER S MOLECULAR MECHANISMS OF MUTATIONS BY AP-SITE	PUBLIC HLTH RES INST OF THE CITY OF NY	NEW YORK	NEW YORK	82	07-83	2	MG		90,088	125,675
7	R01 GM31802-01 21750	FINK, GERALD R REGULATION OF HISTIDINE BIOSYNETHESIS IN YEAST	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	CAMBRIDGE	MASSACHUSETTS	82	11-82	3	MBY		24,500	37,118
1	R01 GM31964-01 21200	MATSUMOTO, LLOYD H THE REPLICATION OF BOVINE SATELLITE DNA	RHODE ISLAND COLLEGE	PROVIDENCE	RHODE ISLAND	82	08-83	2	MBY		74,640	93,638
7	R01 GM31992-01 12840	CHANCE, BRITTON METALLOENZYMES, PROTEINS, AND MODELS	UNIVERSITY CITY SCIENCE CENTER	PHILADELPHIA	PENNSYLVANIA	82	01-83	1	SSS		86,149	149,455
7	R01 GM32018-01 21700	ORDAHL, CHARLES P TRANSCRIPTION OF MUSCLE-SPECIFIC GENES IN MYOGENESIS	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	SAN FRANCISCO	CALIFORNIA	82	06-83	3	GEN		75,799	96,795
7	R01 GM32019-01 21600	ONORATO-SHOWE, LOUISE C GENE REARRANGEMENTS/THE GENERATION OF ANTIBODY DIVERSITY	CHILDREN'S HOSPITAL OF PHILADELPHIA	PHILADELPHIA	PENNSYLVANIA	82	06-83	2	MGN		32,756	43,070
7	R01 GM32092-01 21700	SRIDHARA, S GENE ACTIVITY DURING INSECT METAMORPHOSIS	TEXAS TECH UNIVERSITY	LUBBOCK	TEXAS	82	06-83	1	GEN		36,398	47,317
7	P01 GM32099-01 13700	KANDEL, ERIC R CELLULAR ANALYSES OF BEHAVIOR	NEW YORK STATE OFFICE OF MENTAL HEALTH	ALBANY	NEW YORK	82	04-83	3	SSS		405,626	578,020
5	R01 GM32104-02 13700	MC CREERY, DOUGLAS B SPINAL AND SUPRASPINAL MECHANISMS OF ELECTROANALGESIA	HUNTINGTON MEDICAL RESEARCH INSTITUTES	PASADENA	CALIFORNIA	82	06-83	0	SAT		36,820	59,427
7	R01 GM32111-01 21480	DARLINGTON, GRETCHEN J ACTIVATION OF HUMAN HEPATIC GENES IN CELL HYBRIDS	BAYLOR COLLEGE OF MEDICINE	HOUSTON	TEXAS	82	02-83	4	CTY		64,691	87,826
1	R01 GM32113-01 21280	DALE, RODERIC ORGANIZATION & EXPRESSION OF TOBACCO MITOCHONDRIAL GENOM	UNIVERSITY OF MINNESOTA OF MNPLS-ST PAUL	MINNEAPOLIS	MINNESOTA	82	08-83	2	MBY		70,647	98,199

****	22	* CENTERS	8,463,446	11,947,634
****	2,857	NONCENTERS	197,676,667	284,701,730
****	2,879	TOTAL	206,140,113	296,649,364

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
ABBOTT, MITCHEL T	5	R01 GM25055-05	46,687	0	04-83	BIO		22400
ABELES, ROBERT H	5	R01 GM12633-19	126,288	0	11-82	BIO		22400
ABELES, ROBERT H	5	R01 GM27667-03	122,231	0	05-83	BIO		22400
ABELSON, JOHN N	7	R01 GM31307-01	205,211	4	11-82	BIO		21750
ABERHART, DONALD J	2	R01 GM24420-04	125,008	3	11-82	BNP		11920
ABRAMOVITCH, RUDOLPH A	5	R01 GM25242-04	97,919	0	12-82	MCHA		11930
ABRAMS, ADOLPH	5	R01 GM05810-23	76,736	0	04-83	BIO		22300
ACKERMAN, JOSEPH J	1	R01 GM30331-01 HL	216,186	2	05-83	SSS		12840
ACKERS, GARY K	2	R01 GM24486-06 HL	224,757	4	08-83	BBCA		22500
ADAMS, JULIAN P	1	R01 GM30959-01	83,741	2	07-83	GEN		21800
ADAMS, SHERRILL L	5	R01 GM28840-03	102,922	0	07-83	MGN		21400
ADES, IBRAHIM Z	7	R01 GM31672-01	36,928	0	03-83	BIO		22400
ADESNIK, MILTON B	1	R01 GM30701-01	151,028	2	01-83	MGN		11760
ADOLPH, KENNETH W	5	R01 GM26440-03 ES	55,907	0	01-83	MBY		21600
AEBI, UELI	5	R01 GM27765-03	82,513	0	03-83	MBY		21310
AGABIAN, NINA M	5	R01 GM25527-05	99,711	3	06-83	MBC		22300
AGARWAL, KAN L	2	R01 GM22199-07	113,774	3	03-83	PC		21200
AGRIS, PAUL F	5	R01 GM23037-05	49,066	0	03-83	BBCA		21320
AKESON, WAYNE H	5	R01 GM24900-05	82,598	0	03-83	SSS		13420
ALBERS, H ELLIOTT	1	R01 GM31199-01 NS	64,029	2	07-83	BPO		13700
ALBERTE, RANDALL S	5	R01 GM23944-03	60,398	0	03-83	CTY		22300
ALBERTS, BRUCE M	2	R01 GM23928-06	104,101	4	07-83	MBY		22200
ALBERTS, BRUCE M	5	R01 GM24020-07	183,272	1	08-83	PC		21200
ALBRECHT, ANDREAS C	5	R01 GM10865-23	128,406	3	06-83	BBCA		22600
ALLEN, CHARLES M, JR	5	R01 GM23193-06	60,770	0	06-83	MBC		22400

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

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ALLEN, DONALD O	5	R01 GM26153-04	56,800	0	06-83	MET		21400
ALLEN, FRITZ S	5	R01 GM27046-03	37,586	0	12-82	BBCA		21100
ALLEN, LELAND C	2	R01 GM26462-04	79,671	2	03-83	SSS		22600
ALLEN, RICHARD D	5	R01 GM27283-02	25,697	0	02-83	CBY		22300
ALLEN, ROBERT D	5	R01 GM27284-03	84,566	0	08-83	CBY		22250
ALLEN, ROBERT D	5	R01 GM28313-03	140,454	0	06-83	SSS		12930
ALLEN, SALLY L	5	R01 GM27703-03	105,065	0	03-83	GEN		21700
ALLERHAND, ADAM	5	R01 GM22620-06	68,911	0	02-83	BBCA		22500
ALLFREY, VINCENT G	5	R01 GM17383-12	118,112	3	01-83	SSS		21600
ALLISON, WILLIAM S	2	R01 GM16974-13	106,304	3	05-83	PB		22450
ALLMAN, FRANK D	5	R23 GM29617-02	42,734	1	06-83	SAT		13450
ALTMAN, SIDNEY	5	R01 GM19422-11	141,030	1	08-83	MG		21320
AMES, BRUCE N	5	R01 GM19993-15	138,223	0	12-82	PC		21320
AMIDON, GORDON L	7	R01 GM31568-01	45,695	0	06-83	PHRA		11750
AMMA, ELMER L	5	R01 GM27721-02	52,606	1	01-83	BMT		22500
AMOS, D BERNARD	5	R01 GM10356-19	439,870	2	11-82	IMB		21400
AMZEL, LEON M	2	R01 GM25432-04	116,975	3	03-83	BBCB		22550
ANDERSEN, NIELS H	5	R01 GM26935-04	80,523	0	06-83	BMT		12820
ANDERSEN, OLAF S	5	R01 GM21342-09	124,427	3	05-83	PHY		22300
ANDERSON, C WILLIAM	5	R01 GM28306-03	56,337	0	08-83	SSS		12820
ANDERSON, GARY L	5	R01 GM29767-02	39,330	0	05-83	MCHA		11920
ANDERSON, JOHN A	5	R01 GM27617-03	40,545	0	03-83	BIO		11910
ANDERSON, PAUL M	5	R01 GM22434-06	41,412	0	03-84	BIO		22400
ANDERSON, ROBERT P	1	R01 GM30132-01	110,489	2	01-83	GEN		21700
ANGERER, ROBERT C	2	R01 GM25553-04A1	186,735	4	02-83	MBY		21700

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
APFEL, ROBERT E	1	R01 GM30419-01	83,934	2	04-83	RNM		12910
APIRION, DAVID	2	R01 GM19821-07	228,774	2	11-82	SSS		21320
APPLEQUIST, JON B	5	R01 GM13684-16	49,392	2	08-83	BBCA		22600
ARGOS, PATRICK	5	R01 GM27100-03	50,636	0	05-83	BBCB		22550
ARGOS, PATRICK	5	R01 GM27682-03	38,156	0	07-83	BBCB		22550
ARMSTRONG, RICHARD N	1	R01 GM30910-01 ES	87,698	2	06-83	PB		22400
ARNETT, EDWARD M	5	R01 GM28757-03	87,836	0	06-83	BBCB		22300
ARNHEIM, NORMAN	5	R01 GM25365-03	93,031	0	06-83	GEN		21600
ARNHEIM, NORMAN	1	R01 GM28632-01A1	92,815	2	08-83	MGN		21600
ARNOTT, STRUTHER	5	R01 GM20682-09	100,872	0	05-83	BBCB		22550
ARNOTT, STRUTHER	5	R01 GM17371-10	83,553	1	08-83	BBCA		21100
ARONSON, ARTHUR I	2	R01 GM20606-09	106,327	4	03-83	MBC		21320
ARORA, SATISH K	5	R01 GM25150-05	45,759	0	02-83	BBCA		11870
ARTAVANIS-TSAKONAS, SPYRIDON	5	R01 GM29093-02	89,187	1	03-83	GEN		21700
ARTZ, STANLEY W	5	R01 GM27307-03	92,299	0	11-82	MBC		21750
ASHER, SANFORD A	1	R01 GM30741-01	129,026	2	05-83	BBCB		12840
ASHLEY, TERRY F	5	R01 GM28579-03	74,465	0	03-83	GEN		21600
ATKINSON, ARTHUR J, JR	2	P01 GM22371-07	189,210	2	03-83	PTR		11700
ATTARDI, GIUSEPPE	5	R01 GM11726-19	354,171	1	12-82	GEN		21280
AUGUST, J THOMAS	1	R01 GM31168-01	183,000	4	06-83	CBY		22300
AULD, DAVID S	5	R01 GM24967-03	48,414	1	08-83	BBCA		22400
AULL, JOHN L	5	R01 GM27013-03	62,492	0	02-83	BBCB		22400
AUSTIN, ROBERT H	1	R01 GM30789-01	68,766	2	06-83	BBCA		21100
AVADHANI, NAVAYAN G	1	R01 GM29037-01A1	93,804	3	04-83	PBC		21280
AVERILL, BRUCE A	5	R01 GM28636-02	63,872	1	12-82	BMT		11920

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INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
AXELROD, BERNARD	5	R01 GM27700-02	81,724	0	09-82	BIO		22400
AYLING, JUNE E	5	R01 GM30368-02	104,059	2	06-83	BIO		22400
AZIZ, SANCAR	1	R01 GM31082-01	124,740	2	07-83	MG		21250
BABCOCK, GERALD T	2	R01 GM25480-04	91,722	2	03-83	BMT		22450
BACHOVCHIN, WILLIAM W	5	R01 GM27927-03	35,288	0	07-83	BBCB		22400
BAGSHAW, JOSEPH C	5	R01 GM21376-05	70,969	0	08-83	MBY		21700
BAILEY, DONALD W	5	R01 GM22878-07	129,099	3	03-83	MGN		21700
BAJER, ANDREW S	5	R01 GM26121-04	93,015	1	03-83	CBY		22250
BAKER, BRUCE S	5	R01 GM23345-07	153,249	0	06-83	GEN		21700
BAKER, BRUCE S	5	R01 GM26200-04	34,866	1	03-83	GEN		21700
BAKER, WILLIAM K	5	R01 GM23707-05	56,566	0	12-82	GEN		21700
BAKKEN, AIMEE H	5	R01 GM28905-02	73,734	1	02-83	GEN		21750
BALCH, ALAN L	2	R01 GM26226-04	95,745	4	03-83	BMT		11920
BALDESCHWIELER, JOHN D	2	R01 GM21111-09A1	125,149	2	11-82	BBCB		22500
BALDWIN, ROBERT L	5	R01 GM19988-22	157,621	0	12-82	BBCA		22500
BALIAN, GARY	5	R01 GM28577-02	51,058	1	01-83	PBC		22200
BALLOU, DAVID P	5	R01 GM20877-08	121,953	3	08-83	BMT		11920
BAMBARA, ROBERT A	2	R01 GM24441-04	98,619	2	12-82	BIO		21200
BANASZAK, LEONARD J	2	R01 GM13925-17	181,762	2	07-83	BBCB		22550
BANCROFT, F CARTER	5	R01 GM24442-05	144,757	3	12-82	MBY		21750
BARANY, GEORGE	5	R01 GM28934-02	80,837	1	03-83	MCHA		11440
BARCLAY, STEPHEN L	1	R01 GM30211-01	80,050	2	03-83	GEN		22250
BARDEN, ROLAND E	5	R01 GM20077-08	63,413	1	03-83	BIO		22400

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
BARKER, ROBERT	5	R01 GM27632-03	69,503	2	01-83	PC		22300
BARKLEY, MARY D	2	R01 GM22873-08	101,307	2	08-83	BBCA		21100
BARNES, LARRY D	5	R01 GM27220-03	45,074	0	12-82	CBY		22200
BARNES, WAYNE M	5	R01 GM24956-05	113,887	3	12-82	MG		21750
BARTLETT, PAUL A	1	R01 GM30141-01	121,495	4	01-83	MCHA		11940
BARTLETT, PAUL A	9	R01 GM30759-08	102,489	4	03-83	MCHA		11910
BARTMESS, JOHN E	5	R01 GM27743-03 CA	27,953	0	03-83	BBCA		11920
BARTON, JACQUELINE K	1	R01 GM31213-01	95,669	2	06-83	BMT		21200
BASERGA, RENATO L	5	R01 GM22359-07	74,031	1	02-83	PTHB		21600
BATES, RICHARD D, JR	5	R01 GM23670-06	54,316	0	12-82	BBCA		22600
BAU, ROBERT	1	R01 GM29533-01A1	53,321	2	06-83	BBCA		22550
BAUER, WILLIAM R	5	R01 GM21176-09	97,061	2	11-82	VR		21100
BAUERLE, RONALD H	5	R01 GM26293-03	79,441	0	03-83	MBC		22400
BAUMANN, GILBERT	5	R01 GM27260-03	48,900	0	06-83	PHY		22300
BAUMGARTEN, HENRY E	5	R01 GM27694-03	75,316	2	05-83	MCHA		11920
BAXTER, CHARLES R	1	R01 GM30407-01	132,793	2	04-83	SAT		13420
BAXTER, CHARLES R	*5	P50 GM21681-18	245,538	1	11-82	SGYB		13300
BAXTER, CHARLES R	5	R01 GM25504-03	101,569	0	11-82	SSS		13410
BAYLEY, HAGAN P	1	R01 GM29758-01	89,208	2	01-83	BBCA		22300
BE MILLER, JAMES N	5	R01 GM26193-03	68,261	0	05-83	PBC		22410
BEAK, PETER A	5	R01 GM18874-11	76,096	2	07-83	MCHA		11940
BEALL, HIE PING	1	R01 GM27804-01A2	101,174	2	04-83	PB		22300
BEATTIE, KENNETH L	1	R01 GM30590-01	81,535	4	04-83	MG		21250
BEATTIE, KENNETH L	2	R01 GM25530-04A1	118,691	2	06-83	MG		21200
BEAUDET, ARTHUR L	5	R01 GM27593-02	105,123	1	03-83	MGN		21750

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
BECHTOL, KATHLEEN B	5	R01 GM23892-05	126,672	1	08-83	HED		22200
BECK, STANLEY D	5	R01 GM28012-03	59,580	0	07-83	TMP		22200
BECKER, JEFFREY M	5	R01 GM22087-08	70,607	1	04-83	PB		22300
BECKER, ROBERT P	5	R01 GM27763-03	43,032	0	03-83	CBY		12930
BECKWITH, JONATHAN R	2	R01 GM13017-18	119,189	4	08-83	MG		21750
BEELER, TROY J	5	R01 GM29300-02	13,700	1	03-83	PB		22300
BEER, MICHAEL	5	R01 GM24237-05	84,094	1	12-82	BBCB		12930
BEER, MICHAEL	5	R01 GM27758-03	65,912	0	03-83	MBY		12930
BEGG, DAVID A	5	R01 GM28307-03	102,540	0	06-83	CBY		22250
BEINERT, HELMUT	5	R01 GM12394-19	151,924	1	08-83	PB		22450
BELL, J ELLIS	1	R01 GM30195-01A1	72,232	2	06-83	PB		22400
BELL, ROBERT M	2	R01 GM20015-09	136,586	4	04-83	MBC		22300
BENBOW, ROBERT M	1	R01 GM31247-01	43,199	2	06-83	MBY		21200
BENBOW, ROBERT M	5	R01 GM29490-02	117,879	3	07-83	CTY		21200
BENDER, MYRON L	5	R01 GM20853-20	48,509	1	06-83	BIO		22400
BENDER, ROBERT A	5	R01 GM27111-03	64,608	0	12-82	MBC		21200
BENDER, WELCOME W	5	R01 GM28630-02	100,925	1	11-82	GEN		21700
BENDICH, ARNOLD J	5	R01 GM22870-06	95,375	0	11-82	GEN		21100
BENET, LESLIE Z	5	R01 GM26551-03	113,252	0	03-83	SSS		11380
BENET, LESLIE Z	*5	P50 GM26691-04	297,959	1	07-83	PTR		11300
BENJAMIN, DAVID C	5	R01 GM28241-03	91,075	2	07-83	MGN		21320
BENKOVIC, STEPHEN J	5	R01 GM13306-17	162,450	3	12-82	BIO		11920
BENKOVIC, STEPHEN J	2	R01 GM24129-06	147,929	4	06-83	ET		22400
BENNETT, GEORGE N	2	R01 GM26437-04	100,806	2	03-83	MG		21310
BENTLEY, RONALD	2	R01 GM20053-18	138,690	4	08-83	MBC		11910

TABLE 3 - RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
BENTZ, JOSEPH E	7	R01 GM31506-01	53,048	1	03-83	BBCB		22300
BERCHTOLD, GLENN A	2	R01 GM26388-04	107,890	2	06-83	BNP		11920
BEREZNEY, RONALD	5	R01 GM23922-05	79,453	1	02-83	CTY		21200
BERG, DOUGLAS E	5	R01 GM26333-03	87,612	0	03-83	PC		21200
BERG, PAUL	5	R01 GM13235-18	333,815	2	08-83	EVR		21750
BERGBREITER, DAVID E	5	R01 GM26268-03	60,386	0	09-82	MCHA		11940
BERGER, EDWARD A	2	R01 GM25588-04	129,716	2	03-83	CP		22200
BERGER, NATHAN A	2	R01 GM26463-04	190,402	4	03-83	MGN		21400
BERGET, PETER B	5	R01 GM28952-02	71,359	1	03-83	MBC		21320
BERGET, SUSAN M	5	R01 GM29539-02	86,814	1	07-83	PC		21750
BERGMAN, ROBERT G	5	R01 GM25459-05	113,977	3	07-83	BMT		11940
BERLIN, RICHARD D	1	R01 GM30209-01	135,622	4	01-83	CP		22250
BERMAN, HELEN	5	R01 GM21589-08	85,407	2	11-82	BBCA		21100
BERNE, BRUCE J	2	R01 GM26588-07	97,929	4	04-83	BBCA		22600
BERNHARD, SIDNEY A	5	R01 GM10451-18	94,682	3	06-83	BIO		22400
BERNS, DONALD S	5	R01 GM22247-06	57,255	0	10-82	BBCB		22300
BERNS, MICHAEL W	5	R01 GM23445-06	83,784	2	02-83	CTY		22200
BERNSTEIN, HARRIS	5	R01 GM27219-03	84,010	0	11-82	MBC		21200
BERSOHN, RICHARD	5	R01 GM19019-18	73,376	0	10-82	BMT		22500
BERSON, JEROME A	1	R01 GM30787-01	100,324	2	08-83	MCHA		11940
BERSON, JEROME A	5	R01 GM23375-06	85,919	0	04-83	MCHA		11920
BESSMAN, MAURICE J	2	R01 GM18649-24	115,726	4	11-82	PC		21200
BEVERIDGE, DAVID L	5	R01 GM24914-08	149,453	1	05-83	BBCB		22600
BEWLEY, GLENN C	5	R01 GM23617-06	66,406	0	12-82	GEN		21700
BEZANILLA, FRANCISCO J	5	R01 GM30376-02	95,970	3	07-83	PHY		22400

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
BHANOT, OPINDER S	1	R01 GM31788-01	125,675	2	07-83	MG		21250
BHORJEE, JASWANT S	5	R01 GM27236-03	53,872	0	07-83	CTY		21600
BIELSKI, BENON H	5	R01 GM23656-06	90,928	0	12-82	RAD		11920
BIEMANN, KLAUS	5	R01 GM05472-24	199,276	3	12-82	SSS		12840
BILTONEN, RODNEY L	5	R01 GM26894-04	103,284	1	06-83	BBCB		22300
BIRD, ROBERT E	5	R01 GM25526-05	93,543	3	07-83	MG		21200
BIRKY, C WILLIAM, JR	5	R01 GM19607-10	122,170	1	07-83	GEN		21280
BLACKBURN, ELIZABETH H	5	R01 GM26259-05	102,582	1	06-83	GEN		21600
BLACKBURN, GEORGE L	5	R01 GM24206-05	143,900	3	07-83	SAT		13420
BLAKE, JAMES J	1	R01 GM30072-01	70,948	2	07-83	MCHA		11840
BLAKE, RICHARD D	5	R01 GM22827-06	46,239	0	06-83	BBCA		21100
BLAKLEY, RAYMOND	5	R01 GM30432-02	95,566	1	08-83	BIO		22400
BLANCK, THOMAS J J	5	R01 GM30799-02	58,632	3	04-83	SAT		13200
BLASCHKE, TERRENCE F	5	R01 GM22209-08	120,145	1	08-83	PHRA		11880
BLATTNER, FREDERICK R	5	R01 GM21812-08	239,206	2	01-83	MGN		21200
BLATTNER, FREDERICK R	5	R01 GM28252-02	39,820	0	07-83	SSS		21100
BLAU, HELEN M	5	R01 GM26717-03	76,774	0	06-83	GEN		21480
BLAU, HELEN M	3	R01 GM26717-03S1	29,996	0	06-83	CTY		21480
BLIZARD, DAVID A	5	R01 GM28874-02	100,356	0	06-83	BPO		13700
BLOBEL, GUNTER K	5	R01 GM27155-03	286,612	2	11-82	MBY		22300
BLOCH, DAVID P	5	R01 GM23331-04	56,958	1	02-83	CP		21100
BLOEDOW, DUANE C	1	R01 GM29543-01A1	55,526	2	07-83	PHRA		13420
BLOODGOOD, ROBERT A	2	R01 GM28766-02A1	97,897	2	06-83	CBY		22300
BLOOMFIELD, VICTOR A	2	R01 GM17855-12	147,393	4	05-83	BBCA		22500
BLOOMFIELD, VICTOR A	5	R01 GM28093-03	60,308	1	06-83	BBCA		21100

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
BLUMENFELD, MARTIN S	5	R01 GM22138-08	101,755	1	12-82	GEN		21600
BLUMENFELD, MARTIN S	5	R01 GM29119-02	83,752	1	03-83	GEN		21600
BLUMENFELD, OLGA O	2	R01 GM16389-13	157,200	2	12-82	CTY		22410
BLUMENTHAL, THOMAS	1	R01 GM30870-01	167,343	4	08-83	GEN		21700
BLUMENTHAL, THOMAS	5	R01 GM27148-03	58,785	0	11-82	VR		21280
BOBST, ALBERT M	5	R01 GM27002-06	66,777	2	02-83	BBCA		21100
BOCKRATH, RICHARD C	5	R01 GM21788-08	62,060	1	01-83	RAD		21250
BODE, HANS R	5	R01 GM29130-02	37,792	1	03-83	CBY		22200
BODLEY, JAMES W	5	R01 GM21359-07	90,075	0	12-82	PC		21320
BODLEY, JAMES W	2	R01 GM26832-04	88,226	4	06-83	PC		21320
BODOR, NICHOLAS S	5	R01 AI GM27167-03	60,173	0	11-82	PHRA		11850
BOECKMAN, ROBERT K, JR	1	R01 GM30345-01	72,826	3	08-83	BNP		11910
BOECKMAN, ROBERT K, JR	2	R01 CA GM29290-02	132,726	3	11-82	BNP		11940
BOGENHAGEN, DANIEL F	5	R01 GM29681-02	78,082	3	06-83	PC		21280
BOGORAD, LAWRENCE	5	R01 GM20470-10	102,958	0	05-83	MBY		21280
BOLEN, DAVID W	5	R01 GM22300-08	58,354	1	08-83	PB		22400
BOLENDER, ROBERT P	5	R01 GM22759-05	64,568	3	04-83	CTY		22300
BOLLON, ARTHUR P	5	R01 GM28090-03	67,946	0	06-83	GEN		21600
BOLTON, PHILIP H	5	R01 GM29184-02	31,595	1	03-83	BBCA		21100
BOND, GUY H	5	R01 GM28164-03	33,462	0	08-83	PB		22400
BONNER, JAMES J	5	R01 GM26693-03	64,960	0	11-82	GEN		21700
BONNER, JAMES J	3	R01 GM26693-03S1	20,242	0	11-82	GEN		21700
BORCHARDT, RONALD T	5	R01 GM29332-09	91,272	3	11-82	PBC		11930
BORDER, JOHN R	5	P01 GM15768-13	316,346	0	06-83	SRC		13300
BORER, PHILIP N	5	R01 GM24494-05	44,417	1	02-83	BBCA		21100

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
BORGIA, PETER T	5	R01 GM25176-03	30,148	0	07-83	MBC		21700
BORISY, GARY	5	R01 GM26527-03	92,751	0	09-82	GEN		21750
BORISY, GARY G	1	R01 GM30385-01	87,854	4	01-83	MBY		22250
BORISY, GARY G	5	R01 GM25062-05	119,820	0	03-83	MBY		22250
BOTSTEIN, DAVID	1	R01 GM30467-01	122,264	2	04-83	MGN		21480
BOTSTEIN, DAVID	1	R13 GM31250-01	2,000	0	05-83	CTY		21320
BOTSTEIN, DAVID	5	R01 GM21253-08	133,596	1	05-83	GEN		21700
BOTSTEIN, DAVID	5	R01 GM18973-11	74,850	2	12-82	VR		21200
BOTT, KENNETH F	5	R01 GM26399-03	50,740	0	07-83	MBC		21200
BOURGEOIS-COHN, SUZANNE	5	R01 GM20868-09	223,022	1	11-82	GEN		21750
BOURGEOIS-COHN, SUZANNE	5	R01 GM25617-05	155,295	3	08-83	MG		21750
BOURKE, ROBERT S	*2	P50 GM15426-16	549,555	2	06-83	SRC		13300
BOURNE, HENRY R	5	R01 GM27800-03	216,027	2	05-83	PC		11770
BOURNE, HENRY R	5	R01 GM28310-03	75,615	0	06-83	MGN		11770
BOURQUE, DON P	2	R01 GM26937-04	112,318	4	08-83	CTY		21320
BOWMAN, BARRY J	5	R01 GM28703-02	98,349	1	01-83	PB		22400
BOXER, STEVEN G	5	R01 GM27738-03	57,063	0	07-83	BBCA		22500
BOYD, JAMES B	5	R01 GM25562-04	75,668	0	12-82	GEN		21250
BOYER, HERBERT W	5	R01 GM28749-02	113,809	3	01-83	MG		21750
BOYER, PAUL D	5	R01 GM11094-20	135,320	2	04-83	BIO		22450
BOYNTON, JOHN E	5	R01 GM19427-11	221,207	2	04-83	MBC		21280
BRADBURY, EDWIN M	5	R01 GM26901-04	193,684	0	07-83	MBY		21600
BRADLEY, TIMOTHY J	5	R01 GM27919-03	61,212	0	03-83	CBY		22300
BRADY, DONALD R	5	R01 GM28345-03	32,348	0	08-83	PB		22400
BRAMBL, ROBERT M	5	R01 GM19398-09	58,543	0	05-83	MBC		21280

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
BRAND, LUDWIG	2	R01 GM11632-20	171,380	4	08-83	BBCA		22300
BRANDTS, JOHN F	5	R01 GM11071-20	86,898	0	06-83	BBCB		22500
BRANTON, DANIEL	5	R01 GM20396-10	122,965	0	05-83	CTY		22300
BREEN, GAIL A	1	R01 GM29780-01A1	93,202	2	07-83	BIO	1	21280
BREMER, HANS	2	R01 GM15142-13A1	100,240	2	06-83	MG		21750
BREMER, HANS	5	R01 GM25948-03	63,856	0	08-83	MBC		21200
BRESLAUER, KENNETH J	2	R01 GM23509-04	96,842	2	03-83	BBCA		21100
BRESLOW, ESTHER M	5	R01 GM17528-25	122,296	0	12-82	BBCB		22500
BRESLOW, RONALD C	5	R01 GM25981-04	128,063	0	11-82	BMT		11920
BRESLOW, RONALD C	5	R01 GM18754-21	186,382	3	12-82	MCHA		11920
BRETSCHER, ANTHONY P	5	R01 GM30603-02	56,764	0	08-83	CBY		22250
BREW, KEITH	5	R01 GM21363-09	164,987	2	05-83	BIO		22500
BREWER, JOHN M	5	R01 GM27742-03	59,235	0	03-83	BIO		22400
BRIDENBAUGH, PHILLIP O	5	R01 GM28267-03	50,637	0	06-83	SAT		13200
BRIGGS, ROBERT W	5	R01 GM29307-02	39,211	1	07-83	GEN		21700
BRIGHT, HAROLD J	5	R01 GM11040-18	152,716	0	03-83	PC		22400
BRILL, WINSTON J	5	R01 GM22130-08	91,746	0	07-83	MBC		22400
BROACH, JAMES R	2	R01 GM27929-04	115,595	4	08-83	GEN		21780
BROCKERHOFF, HANS	2	R01 GM21875-07	105,475	4	08-83	BBCB		22300
BRODY, STUART	2	R01 GM21842-07	102,125	2	11-82	MBC		22200
BROKAW, CHARLES J	5	R01 GM21931-07	20,531	1	03-83	CBY		22250
BROKAW, CHARLES J	5	R01 GM18711-11	104,336	0	07-83	CBY		22250
BRONZINO, JOSEPH D	5	R01 GM27226-03	63,644	0	12-83	NEUA		13700
BROOKHART, MAURICE S	5	R01 GM28938-02	86,888	1	06-83	BMT		11940
BROWN, DONALD D	5	R01 GM22395-08	192,296	2	08-83	GEN		21750

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
BROWN, ELLEN B	5	R01 GM27243-03	18,176	0	08-83	BBCB		22300
BROWN, ELLEN B	5	R01 GM27744-03	32,423	0	04-83	BBCB		22300
BROWN, HARRY D	5	R01 GM22679-07	73,944	0	03-83	BBCA		12820
BROWN, HERBERT C	5	R01 GM10937-20	116,820	3	06-83	MCHA		11940
BROWN, LARRY R	1	R01 GM30556-01	86,202	2	04-83	BBCB		22500
BROWN, NEAL C	5	R01 GM28775-02	177,473	3	06-83	BIO		21200
BROWN, RONALD D	2	R01 GM22766-07 AI	113,659	2	03-83	ALY		21750
BROWN, THEODORE L	5	R01 GM23395-06	57,285	0	12-83	BBCB		22500
BROWN, WESLEY M	1	R01 GM30144-01	148,537	2	01-83	MGN		21800
BROWN, WILLIAM E	5	R01 GM24688-05	91,661	1	12-82	BIO		21200
BRUENN, JEREMY A	5	R01 GM22200-08	88,624	2	04-83	MBC		21310
BRUENN, JEREMY A	1	R01 GM29928-01	55,712	2	01-83	MG		21600
BRUMBAUGH, JOHN A	5	R01 GM18969-11	92,005	0	04-83	GEN		21700
BRUNENGRABER, HENRI	5	R01 GM27723-03	72,723	0	03-83	SSS		11760
BRUNS, PETER J	5	R01 GM27871-03	94,951	2	03-83	GEN		21480
BRUNTON, LAURENCE L	2	R01 GM25819-04	70,241	2	11-82	BIO		11770
BRUTLAG, DOUGLAS L	5	R01 GM21498-08	115,693	3	03-83	GEN		21600
BRUTLAG, DOUGLAS L	5	R01 GM28079-03	126,431	2	06-83	GEN		21600
BRYAN, JOSEPH	2	R01 GM26091-04	128,604	4	11-82	CBY		22250
BRYAN, WILLIAM P	5	R01 GM27036-03	52,574	0	03-83	BBCA		22500
BRYANT, ROBERT G	5	R01 GM25757-05	100,315	1	07-83	BMT		11920
BRYANT, ROBERT G	5	R01 GM29428-02	105,371	3	06-83	BBCB		22500
BUCHI, GEORGE H	2	R01 GM09686-21	235,634	4	03-83	BNP		11910
BUKHARI, AHMAD I	5	P01 GM27643-03	891,065	0	05-83	SSS		21780
BUNICK, GERALD J	1	R01 GM29818-01	88,109	2	12-82	BBCA		21600

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
BURCHILL, BROWER R	5	R01 GM24878-03	30,051	0	12-82	CBY		22250
BURGESS, EDWARD M	5	R01 GM12672-12	93,155	0	02-83	MCHA		11910
BURGESS, RICHARD R	5	R01 GM28575-02	87,264	3	11-82	MG		21750
BURGOYNE, LEIGH A	5	R01 GM27968-03	26,173	0	07-83	CTY		21600
BURKE, JOHN F	*5	P50 GM21700-08	576,746	3	11-82	SRC		13300
BURKE, STEVEN D	5	R01 GM28321-03	65,198	0	06-83	MCHA		11910
BURNS, RICHARD O	5	R01 GM12551-18	92,115	2	04-83	MBC		22400
BURR, BENJAMIN	1	R01 GM31093-01	126,218	1	07-83	GEN		21780
BURRIDGE, KEITH W	5	R01 GM29860-02	119,072	0	03-83	CBY		22250
BURTON, PAUL R	5	R01 GM24992-17	40,013	0	11-82	CBY		22250
BUSCH, DARYLE H	5	R01 GM10040-20	110,000	0	06-83	BMT		11920
BUTLER, LARRY G	5	R01 GM23028-06	76,766	2	06-83	BIO		22400
BUTLER, WARREN L	5	R01 GM20648-09	69,935	0	06-83	BBCA		22200
BUTOW, RONALD A	5	R01 GM22525-07	74,750	1	04-83	MBY		21280
BYERS, BRECK E	2	R01 GM18541-11	120,039	4	05-83	GEN		22250
BYERS, LARRY D	5	R01 GM24765-03	36,504	0	11-82	BIO		22400
BYNG, GRAHAM S	1	R01 GM30729-01	59,558	2	04-83	CP		22400
CABANTCHIK, Z IOAV	5	R01 GM27753-03	42,088	0	04-83	BBCA		22300
CABRAL, FERNANDO R	1	R01 GM29955-01	86,344	2	01-83	CBY		22250
CAHALAN, MICHAEL K	5	R23 GM28502-02	44,475	1	11-82	SAT		13250
CAIRNS, JOHN	5	R01 GM28910-02	57,489	1	08-83	CPA		21250
CALAME, KATHRYN L	5	R01 GM29361-02	86,675	1	11-82	MGN		21750
CALHOUN, DAVID H	5	R01 GM23182-07	67,095	1	06-83	MBC		21750

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TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
CALKINS, JOHN	5	R01 GM28351-02	59,122	0	12-82	RAD		21250
CALVET, JAMES P	5	R01 GM30547-02	69,585	0	07-83	MBY		21750
CAMPBELL, IAIN M	5	R01 GM25592-03	75,546	0	12-82	BMT		12840
CAMPBELL, JUDITH L	5	R01 GM25508-05	95,445	3	08-83	MG		21200
CANDE, W ZACHEUS	2	R01 GM23238-07	114,549	4	06-83	CBY		22250
CANE, DAVID E	1	R01 GM30301-01	99,282	2	12-82	MCHA		11920
CANE, DAVID E	5	R01 GM22172-08	109,405	0	07-83	BNP		11910
CANN, JOHN R	5	R01 GM28793-31	119,707	3	05-83	BBCA		22500
CANTLEY, LEWIS C	2	R01 GM26199-04	72,694	4	03-83	PB		22300
CANTLEY, LEWIS C, JR	5	R01 GM28538-02	53,052	1	03-83	PB		22300
CANTOR, CHARLES R	5	R01 GM14825-16	144,756	2	01-83	BBCA		21100
CANTOR, CHARLES R	2	R01 GM19843-10	147,359	4	11-82	BBCA		21320
CAPECCHI, MARIO R	2	R01 GM21168-09	165,572	4	11-82	MGN		21750
CARMAN, GEORGE M	5	R01 GM28140-03	50,712	0	06-83	PC		22300
CARPENTER, ADELAIDE T	2	R01 GM23338-07	105,845	4	06-83	GEN		21600
CARPENTER, BARRY K	5	R01 GM27022-03	70,600	0	12-82	MCHA		11930
CARPINO, LOUIS A	2	R01 GM09706-17	118,098	4	08-83	MCHA		11440
CARRAWAY, KERMIT L	7	R01 GM30295-01	57,260	0	11-82	CBY		22250
CARRICO, C JAMES	*5	P50 GM24990-05	435,746	3	07-83	SRC		13300
CARROLL, DANA	5	R01 GM22232-08	115,762	1	05-83	GEN		21200
CARSON, DENNIS A	2	R01 GM23200-07	145,824	4	06-83	MGN		21400
CARSTENSEN, EDWIN L	5	R01 GM09933-20	119,780	2	04-83	RNM		12910
CARTER, CHARLES W, JR	5	R01 GM26203-03	54,696	0	03-83	BBCB		22550
CARUTHERS, MARVIN H	5	R01 GM21120-08	125,353	0	11-82	PC		21750
CARUTHERS, MARVIN H	2	R01 GM25680-04	97,411	4	11-82	BNP		21750

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
CASADABAN, MALCOLM J	5	R01 GM29067-02	77,292	0	03-83	MG		21780
CASE, STEVEN T	5	R01 GM26362-03	66,213	0	12-82	MBY		21600
CASERIO, MARJORIE C	5	R01 GM27319-06	45,492	0	07-83	MCHA		11920
CASHMORE, ANTHONY R	1	R01 GM31137-01	94,451	2	07-83	MBY		21750
CASJENS, SHERWOOD R	5	R01 GM21975-06	48,548	0	10-82	VR		21320
CASKEY, CHARLES T	5	R01 GM27235-03	81,652	0	12-82	MBY		21320
CASTLE, JOHN D	2	R01 GM26524-04	94,437	4	03-83	CBY		22300
CASTRIC, PETER A	5	R01 GM20419-05	42,695	0	11-82	BIO		22400
CAVALLI-SFORZA, LUIGI L	5	R01 GM20467-10	264,772	3	07-83	SSS		21400
CAVALLI-SFORZA, LUIGI L	5	P01 GM28428-03	450,324	0	04-83	SSS		21400
CECH, THOMAS R	5	R01 GM25273-05	88,281	1	03-83	MBY		21600
CECH, THOMAS R	5	R01 GM28039-03	67,952	0	07-83	MBY		21750
CEDAR, HOWARD	5	R01 GM20483-09	67,302	0	05-83	MGN		21600
CHAE, CHI-BOM	5	R01 GM21846-07	49,990	0	03-83	PBC		21600
CHAE, CHI-BOM	5	R01 GM27839-03	65,386	0	03-83	MBY		21250
CHAKRABORTY, RANAJIT	5	R01 GM28574-02	18,975	0	11-82	MGN		21800
CHALFIE, MARTIN	1	R01 GM30997-01	121,142	2	07-83	GEN		21700
CHALKLEY, ROGER G	5	R01 GM27228-03	93,957	0	12-82	CTY		21600
CHALKLEY, ROGER G	5	R01 GM28817-15	110,832	1	04-83	CTY		21600
CHAMBERLIN, A RICHARD	1	R01 GM30073-01	58,435	2	01-83	MCHA		11910
CHAMBERLIN, MICHAEL J	2	R01 GM12010-19	195,716	4	03-83	MG		21310
CHAMBERS, JAMES P	5	R01 GM28949-02	51,445	1	03-83	PBC		22410
CHAMPE, SEWELL P	5	R01 GM17020-14	121,715	0	04-83	GEN		21320
CHAMPNEY, WILLIAM S	5	R01 GM27622-03	65,586	0	06-83	MBC		21320
CHAMPOUX, JAMES J	5	R01 GM23224-07	93,031	0	07-83	GEN		21200

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
CHAN, SUNNEY I	5	R01 GM22432-08	211,379	2	08-83	BBCB		22300
CHAN, TEH-SHENG	5	R01 GM26522-04	81,290	1	11-82	MGN		21480
CHAN, TEH-SHENG	5	R01 GM27589-02	63,204	1	01-83	PTHA		22100
CHANCE, BRITTON	7	R01 GM31992-01	149,455	1	01-83	SSS		12840
CHANCE, BRITTON	5	R01 GM27308-04	154,343	1	04-83	BBCB		22450
CHANG, SIMON H	5	R01 GM28481-02	40,401	1	12-82	PC		21320
CHAO, LEE	2	R01 GM26689-04	71,710	2	08-83	MG		21250
CHAPMAN, TOBY M	5	R01 GM26870-03	57,959	0	06-83	BNP		21100
CHAPMAN, VERNE M	2	R01 GM24125-06	126,775	2	07-83	MGN		21800
CHAPMAN, VERNE M	5	R01 GM26770-04	148,351	1	06-83	GEN		21750
CHAPMAN, VERNE M	5	P01 GM19521-10	781,841	0	04-83	SSS		21700
CHAPMAN, VERNE M	3	P01 GM19521-10S1	269,856	0	04-83	SSS		21700
CHASE, JOHN W	5	R01 GM23451-05	66,235	3	12-82	BIO		21200
CHASIN, LAWRENCE A	5	R01 GM22629-08	188,808	1	08-83	MGN		21480
CHASTEEN, NORMAN D	2	R01 GM20194-10	97,029	4	06-83	BMT		22500
CHATTERJEE, NANDO K	5	R01 GM27792-02	72,440	1	03-83	BIO		21320
CHAU, VINCENT	1	R01 GM30554-01	72,244	2	06-83	BIO	1	22400
CHEN, HARRY W	5	R01 GM22900-07	130,968	1	03-83	MBY		22300
CHEUNG, WAI YIU	5	R01 GM28178-02	79,791	1	08-83	BIO		22400
CHIKARAISHI, DONA M	5	R01 GM29302-02	83,977	0	11-82	MBY		21320
CHIKARAISHI, DONA M	1	R01 GM29986-01	65,390	2	08-83	MBY		21320
CHILDS, GEOFFREY J	1	R01 GM30333-01	131,162	2	01-83	GEN		21780
CHINAULT, ALAN C	5	R01 CA GM27304-03	77,557	0	05-83	MBY		21600
CHIRIKJIAN, JACK G	5	R01 GM27701-03	63,207	2	03-83	BIO		21200
CHIU, WAH	2	R01 GM27061-04	104,216	2	06-83	BBCB		12930

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
CHLEBOWSKI, JAN	5	R01 GM27493-04	59,986	1	05-83	BBCA		22400
CHO, ARTHUR K	5	R01 GM26024-03	79,335	0	01-83	PHRA		11860
CHOOI, YEAN W	5	R01 GM23410-05	97,146	3	06-83	MBY		21320
CHOTHIA, CYRUS	2	R01 GM25435-04	23,957	2	11-82	BBCB		22500
CHOVNICK, ARTHUR	5	R01 GM09886-21	218,909	1	03-83	GEN		21700
CHRISTENSEN, JAMES R	5	R01 GM26147-04	52,435	0	07-83	EVR		21750
CHRISTIAN, CHARLES, II	1	R01 GM30820-01	127,155	2	07-83	SAT		13200
CHRISTIAN, GARY D	5	R01 HL GM22311-07	83,505	1	08-83	BMT		12820
CHU, ERNEST H	5	R01 GM20608-08	87,981	2	11-82	MGN		21600
CHUA, NAM-HAI	1	R01 GM30726-01	137,108	4	04-83	GEN		21280
CHUA, NAM-HAI	5	R01 GM25114-05	160,108	0	03-83	MBY		22300
CHUNG, ALBERT E	5	R01 GM25690-04	101,559	2	12-82	CTY		22410
CHUNG, LELAND W	5	R01 GM25027-05	93,368	1	07-83	PHRA		11780
CHUNG, STEPHEN S	1	R01 GM31226-01	93,277	2	06-83	CTY		21700
CHUNG, SUNG-KEE	5	R01 GM25288-02	28,793	0	10-82	BMT		11920
CHURCHICH, JORGE E	5	R01 GM27639-03	50,606	0	06-83	PB		22400
CIANI, SERGIO	5	R01 GM27042-06	70,120	0	11-82	PHY		22300
CLARK, ROGER W	2	R01 GM30379-02	94,836	2	08-83	BBCA		21600
CLARKE, MARGARET	5	R01 GM29723-02	119,299	1	06-83	CTY		22250
CLARKE, MICHAEL J	5	R01 GM26390-03	39,943	0	07-83	BMT		11920
CLARKE, STEVEN G	2	R01 GM26020-04	91,234	4	11-82	PC		22300
CLARKSON, THOMAS W	5	R01 GM25329-04	130,870	3	12-82	TOX		11790
CLELAND, WILLIAM W	2	R01 GM18938-11	126,701	4	12-82	BIO		22400
CLEVELAND, DON W	5	R01 GM29513-02	96,125	1	06-83	MBY		22250
CLINE, THOMAS W	5	R01 GM23468-06	97,866	2	12-82	GEN		21700

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
COATES, ROBERT M	5	R01 GM13956-17	102,284	0	02-83	MCHA		11920
COCHRANE, BRUCE J	1	R01 GM30891-01	51,735	2	07-83	MBY		11760
COCKERHAM, C CLARK	5	P01 GM11546-19	413,879	3	11-82	SSS		21800
COFFMAN, ROBERT E	2	R01 GM24480-04	73,253	2	08-83	BMT		11920
COHEN, EDWARD H	7	R01 GM30340-01	45,658	0	12-82	GEN		21600
COHEN, FREDRIC S	1	R01 GM31039-01	93,520	2	06-83	PHY		22300
COHEN, FREDRIC S	5	R01 GM27367-03	62,186	0	03-83	BBCB		22300
COHEN, IRWIN K	5	R01 GM20298-09	112,050	2	11-82	SAT		13420
COHEN, LEONARD H	2	R01 GM24019-06	134,927	2	03-83	MBY		21700
COHEN, SEYMOUR S	2	R01 GM25522-04	93,202	2	08-83	MBC		21280
COHEN, STANLEY N	5	R01 GM26355-04	156,000	1	06-83	MBC		21200
COHEN, STANLEY N	5	R01 GM27241-03	161,604	2	11-82	SSS		21750
COHEN, THEODORE	5	R01 GM22760-07	104,983	1	08-83	MCHA		11940
COHN, MILDRED	5	R01 GM12446-18	168,695	0	02-83	BBCB		22500
COLE, R DAVID	5	R01 GM20338-15	139,035	0	05-83	PC		21600
COLEMAN, JOSEPH E	5	R01 GM21919-08	89,390	0	05-83	BBCB		21600
COLLINS, J	5	R01 GM29065-02	67,114	1	03-83	SAT		13200
COLLINS, KIM D	5	R01 GM28773-02	71,962	1	01-83	BIO		22400
COLLINS, ROBERT L	2	R01 GM23618-06	128,508	2	07-83	MGN		13700
COLLMAN, JAMES P	5	R01 GM17880-12	125,771	0	11-82	MCHB		11920
COLLUM, DAVID B	1	R01 GM30350-01 CA	88,033	3	01-83	MCHA		11910
COLLUM, DAVID B	1	R01 GM30875-01	89,042	2	08-83	MCHA		11940
COLMAN, ROBERTA F	5	R01 GM21200-09	82,563	2	05-83	BIO		22400
COLOMBINI, MARCO	5	R01 GM28450-02	60.389	1	12-82	PHY		22300
COLOWICK, SIDNEY P	5	R01 GM20656-24	147,406	1	11-82	BIO		22400

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
COMINGS, DAVID E	5	R01 GM15826-16	130,667	2	11-82	GEN		21600
COMINS, DANIEL L	1	R01 GM30255-01A1	39,393	2	07-83	MCHA		11910
CONDEELIS, JOHN S	2	R01 GM25813-04	121,255	4	11-82	CBY		22250
CONN, ERIC E	2	R01 GM05301-25	96,558	4	02-83	PC		11920
CONNEALLY, P MICHAEL	5	R01 GM26659-03	82,708	2	12-82	MGN		21480
COOK, CLARENCE E	5	R01 GM23197-06	113,648	0	12-82	PHRA		11770
COOK, JAMES A	5	R01 GM27673-03	54,048	0	03-83	SAT		13410
COOK, PAUL F	7	R01 GM31686-01	39,075	2	06-83	PB		22400
COOK, WILLIAM J	5	R01 GM27144-03	17,477	0	03-83	BBCB		22550
COOK, WILLIAM J	5	R01 GM29427-02	62,821	1	06-83	BBCB		22550
COOPER, JEFFREY B	5	R01 GM22023-06	119,495	0	09-82	SGYA		12500
COOPER, STEPHEN	5	R01 GM28208-03	65,349	0	07-83	CTY		22200
COOPER, TERRANCE G	2	R01 GM20693-06	72,276	4	11-82	PC		21320
COOPER, TERRANCE G	5	R01 GM24383-04	80,429	1	12-82	BIO		22300
COOPER, TERRANCE G	5	R01 GM19386-11	124,813	2	04-83	PC		21320
COREY, ELIAS J	5	R01 GM18519-12	187,264	3	06-83	MCHA		11940
CORREIA, MARIA A,	5	R01 GM24707-03	72,960	0	11-82	PHRA		11880
COSLOY, SHARON D	5	R01 GM22562-06	64,110	0	11-82	MBC		21200
COSTELLO, MARTIN J, III	5	R01 GM27914-03	62,824	0	06-83	BBCB		22300
COTTON, F ALBERT	5	R01 GM19455-11	86,224	0	07-83	BBCB		22550
COTTON, THERESE M	1	R01 GM30240-01	136,028	2	01-83	BMT		12840
COTTRELL, STEPHEN F	5	R01 GM25901-03	45,610	0	08-83	MBY		22450
COUCOUVANIS, DIMITRI N	2	R01 GM26671-04	90,848	2	07-83	BMT		11920
COURTRIGHT, JAMES B	5	R01 GM27866-03	47,319	0	08-83	GEN		21700
COWAN, NICHOLAS J	1	R01 GM31740-01	128,279	2	08-83	MGN		21400

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
COWARD, JAMES K	9	R01 GM30286-04 MH	105,809	2	02-83	PB		11920
COX, DAVID J	2	R01 GM22243-07A1	55,980	2	07-83	BBCB		22500
COX, EDWARD C	5	R01 GM28923-12	112,645	0	07-83	MBC		21200
COZZARELLI, NICHOLAS R	7	R01 GM31655-01	41,151	1	02-83	PBC		21200
COZZARELLI, NICHOLAS R	7	R01 GM31657-01	129,665	2	06-83	MG		21200
CRAIG, ELIZABETH A	1	R01 GM31107-01	94,648	2	06-83	GEN		21750
CRAIG, ELIZABETH A	5	R01 GM27870-03	79,025	0	03-83	GEN		21750
CRAM, DONALD J	5	R01 GM12640-18	111,404	2	11-82	MCHA		11920
CRAMER, WILLIAM A	5	R01 GM18457-12	86,012	1	08-83	BBCB		22300
CRAVEN, BRYAN M	5	R01 GM22548-20	53,501	0	12-82	BBCA		11870
CRAVEN, GARY R	2	R01 GM24109-06	182,513	4	07-83	MBY		21320
CRAVEN, PATRICIA A	5	R01 GM28368-03	66,988	0	08-83	BIO		22400
CRAWFORD, IRVING P	5	R01 GM25735-04	78,430	0	03-83	MBC		22400
CRIPPEN, GORDON M	1	R01 GM30561-01	53,213	2	04-83	BBCA		22500
CROCE, CARLO M	5	R01 GM20700-08	111,532	0	11-82	GEN		21480
CROFTS, ANTONY R	5	R01 GM26305-04	106,962	0	03-83	BBCA		22450
CRONAN, JOHN E, JR	5	R01 GM26156-03	35,960	0	12-82	MBC		22400
CRONIN, JOHN R	5	R01 GM27200-03	34,158	0	06-83	BBCB		22450
CRONNELLY, ROY	5	R23 GM28812-02	44,475	1	03-83	PHRA		13250
CROSBY, GREGORY J	1	R23 GM30502-01	46,209	2	04-83	SAT		13250
CROSS, RICHARD L	5	R01 GM23152-05	73,284	1	06-83	PB		22450
CROTHERS, DONALD M	5	R01 GM21966-08	115,044	1	01-83	BBCA		21100
CULBERTSON, MICHAEL R	2	R01 GM26217-04	99,574	4	03-83	GEN		21320
CUMMINGS, DONALD J	5	R01 GM21948-06	90,204	0	12-82	CTY		21280
CURRERI, P WILLIAM	5	R01 GM29796-02	88,307	2	01-83	SAT		13420

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
CUSANOVICH, MICHAEL A	2	R01 GM21277-07A1	107,056	4	03-83	SSS		22450
CUSHMAN, MARK S	9	R01 GM30932-07 CA	74,966	2	06-83	MCHA		11910
CZERWINSKI, EDMUND W	5	R01 GM27024-03	55,083	0	12-82	BBCA		22550
DAHLBERG, ALBERT E	5	R01 GM19756-11	143,631	0	08-83	PC		21320
DAHLBERG, JAMES E	1	R01 GM30220-01	117,970	2	03-83	GEN		21750
DAHLQUIST, FREDERICK W	5	R01 GM24792-05	87,749	3	12-82	BBCB		22300
DALE, RODERIC	1	R01 GM32113-01	98,199	2	08-83	MBY		21280
DAMJANOV, IVAN	5	R01 GM29040-02	85,704	1	04-83	PTHB		22200
DANHEISER, RICK L	2	R01 GM25950-04	106,533	2	11-82	MCHA		11910
DANHEISER, RICK L	5	R01 GM28273-03	68,704	0	06-83	MCHA		11940
DANIEL, WILLIAM L	5	R01 GM27707-03	28,695	0	03-83	MGN		21320
DANIELL, ELLEN	1	R01 GM30864-01	54,788	1	06-83	EVR		21600
DANIELS, LACY	1	R01 GM30868-01 AI	97,297	2	06-83	MBC		22400
DARLINGTON, GRETCHEN J	7	R01 GM32111-01	87,826	4	02-83	CTY		21480
DARNALL, DENNIS W	5	R01 GM28166-03	61,934	0	07-83	BBCA		22500
DAS, ASIS K	5	R01 GM28946-02	81,866	1	03-83	MG		21750
DATTA, PRASANTA	5	R01 GM21436-08	81,855	2	02-83	BIO		22400
DAUBEN, WILLIAM G	5	R01 GM27320-23	75,006	2	11-82	MCHA		11910
DAVES, G DOYLE, JR	5	R01 GM30310-02	83,567	0	06-83	MCHA		11930
DAVID, CARL W	5	R01 GM26525-03	69,038	0	09-82	BBCA		22600
DAVID, JOHN D	5	R01 GM28657-02	54,014	1	11-82	CTY		22200
DAVIDSON, ERIC H	5	P01 GM20927-08	352,075	1	05-83	SSS		21600
DAVIDSON, ERNEST R	2	R01 GM22937-07	74,986	2	06-83	BBCA		22600

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
DAVIDSON, NORMAN R	2	R01 GM10991-23	310,650	3	05-83	CTY		21600
DAVIDSON, RICHARD L	1	R13 GM30430-01	2,000	0	05-83	GEN		21480
DAVIS, BERNARD D	5	R01 GM16835-14	167,824	1	05-83	MBC		21320
DAVIS, DONALD G	5	R01 GM24267-06	42,558	0	06-83	BBCB		22300
DAVIS, FRANK F	2	R01 GM20946-08	161,019	2	11-82	ET		12820
DAVIS, JOHN M	1	R23 GM30086-01	50,840	2	01-83	SAT		13450
DAVIS, LAWRENCE C	2	R01 GM23039-06	26,905	2	05-83	BBCA		22500
DAVIS, RONALD W	5	R01 GM21891-08	146,838	0	02-83	MBY		21750
DAVISSON, MURIEL T	5	R01 GM27102-03	105,828	0	04-83	MGN		21480
DAWIDOWICZ, ELIEZAR A	5	R01 GM22175-07	128,825	1	03-83	BBCB		22300
DAWSON, JOHN H	5	R01 GM26730-03	51,589	0	06-83	BMT		22400
DAYHOFF, MARGARET O	2	R01 GM08710-22	364,472	1	07-83	SSS		22500
DE FRANCESCO, LAURA	5	R01 GM31260-02	53,435	0	11-83	MGN		21480
DE HARVEN, ETIENNE	5	R01 GM27733-02	23,902	0	11-82	CBY		22300
DE LANGE, ROBERT J	5	R01 GM28677-02	138,459	3	11-82	BIO		21600
DE MARS, ROBERT I	5	R01 GM06983-23	165,588	0	04-83	MGN		21250
DE MOSS, JOHN A	5	R01 GM27887-03	101,214	0	04-83	GEN		22400
DE MOSS, JOHN A	5	R01 GM19511-11	110,029	1	07-83	MBC		22500
DE RIEL, JON K	5	R01 GM28557-02	87,691	1	12-82	MBY		21700
DE ROSIER, DAVID J	5	R01 GM21189-09	141,813	3	02-83	BBCB		22550
DE ROSIER, DAVID J	5	R01 GM21189-10	189,882	2	08-83	BBCB		22550
DE SHONG, PHILIP R	1	R01 GM30743-01	90,929	2	08-83	MCHA		11940
DE TAR, DELOS F	5	R01 GM27814-02	47,304	0	01-83	BBCB		22400
DEBRUNNER, PETER G	5	R01 GM16406-14	102,958	1	12-82	BBCB		22500
DEDMAN, JOHN R	5	R01 GM29323-03	80,606	1	08-83	CP		22250

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
DEERING, REGINALD A	5	R01 GM16620-13	125,047	2	04-83	RAD		21250
DEGNAN, KEVIN J	1	R01 GM31074-01	101,356	2	06-83	PHY		22300
DEIBEL, MARTIN R, JR	1	R01 GM31076-01	74,908	2	06-83	BIO	1	21250
DEININGER, PRESCOTT L	1	R01 GM29848-01	89,220	2	02-83	BIO		21600
DEL BENE, JANET E	5	R01 GM27955-03	32,045	0	07-83	BBCA		22600
DELIHAS, NICHOLAS	5	R01 GM20052-09	43,406	0	08-83	MBY		21320
DEMLING, ROBERT H	7	R01 GM31662-01	152,350	1	06-83	SAT		13410
DENELL, ROBIN E	5	R01 GM27195-03	56,633	0	12-82	GEN		21700
DENMARK, SCOTT E	1	R01 GM30938-01	50,336	2	07-83	MCHA		11940
DENNEY, DONALD B	5	R01 GM26428-18	82,247	0	04-83	MCHA		11930
DENNIS, EDWARD A	5	R01 GM20501-08	100,771	3	05-83	PC		22400
DEONIER, RICHARD C	5	R01 GM24589-05	99,070	3	12-82	MG		21780
DEPEW, RICHARD E	5	R01 GM25500-05	98,715	3	06-83	MG		21200
DEROSIER, DAVID J	2	R01 GM26357-04	54,358	2	03-83	BBCB		22550
DERVAN, PETER B	5	R01 GM27681-03	69,265	0	03-83	BBCA		21100
DESIDERIO, DOMINIC M	2	R01 GM26666-04	141,481	2	08-83	BMT		11440
DESIDERIO, DOMINIC M	5	R01 GM28611-02	41,916	1	01-83	SSS		22500
DETKE, SIEGFRIED	1	R01 GM29110-01A1	166,526	1	08-83	MGN		21600
DEUTSCH, MARTIN	5	R01 GM24918-05	122,531	1	03-83	BBCB		12840
DEUTSCH, WALTER A	5	R01 GM27358-02	44,074	1	01-83	BIO		21250
DEUTSCHER, MURRAY P	5	R01 GM16317-15	182,723	1	08-83	PC		21320
DEVREOTES, PETER N	5	R01 GM28007-03	65,906	0	06-83	CBY		22200
DEWEY, MAYNARD M	2	R01 GM26392-04	108,939	2	06-83	CBY		22250
DI BERARDINO, MARIE A	5	R01 GM23635-05	117,144	1	03-83	CBY		21700
DIAMOND, JARED M	5	R01 GM14772-15	125,898	1	03-83	PHY		22300

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
DICKERSON, RICHARD E	5	R01 GM30543-02	167,242	1	08-83	BBCA		21100
DICKERSON, RICHARD E	3	R01 GM30543-02S1	28,052	1	08-83	BBCA		21100
DICKSON, ROBERT C	2	R01 GM22749-07	126,070	4	03-83	BIO		21750
DIEM, MAX	1	R01 GM28619-01A1	85,013	2	01-83	BBCA		22500
DILLEY, RICHARD A	5	R01 GM19595-09	62,158	0	02-83	BIO		22450
DIMOND, RANDALL L	1	R01 GM31181-01	67,308	2	06-83	MBY		21700
DIMOND, RANDALL L	5	R01 GM26632-03	86,957	0	02-83	GEN		22200
DIMOND, RANDALL L	5	R01 GM29156-02	89,034	1	03-83	MBY		22200
DISMUKES, G CHARLES	5	R01 GM28789-02	62,220	1	03-83	BBCA		22450
DISTECHE, CHRISTINE M	1	R01 GM30476-01	99,960	2	04-83	MGN		21480
DJERASSI, CARL	5	R01 GM20276-09	90,487	0	06-83	BMT		22500
DJERASSI, CARL	2	R01 GM06840-24	300,478	4	04-83	BNP		11910
DJERASSI, CARL	5	R01 GM28352-22	188,379	1	02-83	SSS		11910
DOANE, WINIFRED W	5	R01 GM25255-05	153,669	1	12-82	GEN		21700
DODGSON, JERRY	5	R01 GM28836-02	66,605	0	01-83	GEN		21700
DODGSON, JERRY B	5	R01 GM28837-03	81,267	0	07-83	GEN		21750
DODGSON, JERRY B	1	R01 GM29687-01	62,492	2	08-83	GEN		21700
DOERMANN, AUGUST H	5	R01 GM13280-19	170,397	0	12-82	EVR		21320
DOI, ROY H	5	R01 GM19673-11	90,733	3	08-83	MG		21750
DOLPHIN, DAVID H	5	R01 GM29198-02	75,549	1	06-83	PB		11920
DONIACH, SEBASTIAN	5	R01 GM25217-05	69,093	1	03-83	BBCA		22550
DONOHUE, JERRY	2	R01 GM20611-06	40,442	2	11-82	BBCA		22550
DOOLEY, DAVID M	5	R01 GM27659-03	49,808	0	06-83	PB		22400
DORSET, DOUGLAS L	2	R01 GM21047-09	131,952	2	05-83	BBCB		22550
DOTTIN, ROBERT P	5	R01 GM27310-03	95,234	0	11-82	MBY		21700

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
DOUGLAS, MICHAEL G	2	R01 GM25648-04	115,722	4	11-82	GEN		22300
DOUGLAS, MICHAEL G	2	R01 GM26713-04	54,984	2	07-83	CTY		22300
DOWD, PAUL	2	R01 GM19906-06	88,446	2	11-82	BNP		11920
DOWHAN, WILLIAM	2	R01 GM20478-10	97,216	4	06-83	BIO	1	22300
DOWHAN, WILLIAM	5	R01 GM25047-05	81,515	1	03-83	MBC		22300
DOWNES, HALL	5	R01 GM24524-03	54,590	0	12-82	SGYA		13200
DOWNEY, RONALD J	5	R01 GM29245-03	39,541	0	08-83	MBC		21750
DOWNING, KENNETH H	5	R01 GM27291-03	48,052	0	03-83	MBY		21100
DOYLE, DARRELL J	5	R01 GM24147-05	143,081	1	12-82	CTY		22300
DRAPER, DAVID E	5	R01 GM29048-02	48,199	1	03-83	BBCA		21320
DRESSLER, DAVID H	5	R01 GM17088-13	93,644	3	11-82	MG		21200
DRICKAMER, KURT	1	R01 GM30823-01	124,275	2	01-83	CP		22300
DRLICA, KARL A	5	R01 GM24320-06	117,307	2	08-83	MG		21600
DROST, CORNELIS J	1	R01 GM29106-01	76,378	0	03-83	RNM		12910
DRYHURST, GLENN	5	R01 GM21034-09 FD	74,381	0	06-83	SSS		11920
DUBIN, DONALD T	5	R01 GM14957-15	123,071	3	01-83	MBY		21320
DUBIN, DONALD T	5	R01 GM28100-03	70,326	0	08-83	MBY		21320
DUDOCK, BERNARD S	5	R01 GM25254-13	73,141	0	12-82	PC		21320
DUFFY, JOHN J	1	R01 GM30249-01	87,705	2	01-83	MBY		21750
DUMAS, LAWRENCE B	5	R01 GM23443-06	125,408	2	12-82	MBY		21200
DUNAWAY-MARIANO, DEBRA	5	R01 GM28688-02	74,994	1	01-83	PB		11920
DUNCAN, BRUCE K	5	R01 GM27813-03	53,710	0	03-83	MBC		21600
DUNKER, A KEITH	2	R01 GM25937-04	65,213	3	03-83	BBCB		22300
DUNN, FLOYD	2	R01 GM12281-19	93,745	4	08-83	RNM		12910
DURE, LEON S, III	5	R01 GM28334-03	85,386	3	06-83	MBY		21320

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
DUS, KARL M	5	R01 GM21726-07	78,230	0	03-83	BIO		22500
DUTTON, PETER L	5	R01 GM27309-04	153,590	1	04-83	BBCB		22450
DWORKIN, MARTIN	5	R01 GM19957-10	88,626	3	05-83	MBC		22200
DYKHUIZEN, DANIEL E	5	R01 GM30201-02	138,634	3	08-83	GEN		21800
EAKIN, RICHARD M	5	R01 GM28778-21	67,001	0	08-83	VID		22200
EATON, GARETH R	5	R01 GM21156-09	95,095	0	06-83	BBCB		22500
EATON, GARETH R	2	R01 GM26566-03A1	57,298	2	08-83	BMT		22500
EATON, PHILIP E	5	R01 GM29258-10	157,533	1	03-83	MCHA		11930
EAVES, LINDON J	1	R01 GM30250-01	21,538	3	01-83	MGN		21400
EBERLE, HELEN I	5	R01 GM28430-02	95,738	1	01-83	MG		21200
ECCLESTON, JOHN F	5	R01 GM29603-02	101,977	1	06-83	PC		21320
ECHOLS, G HARRISON, JR	5	R01 GM17078-14	181,194	1	08-83	VR		21750
EDELSTEIN, STUART J	5	R01 GM24800-05	90,743	3	01-83	CBY		22250
EDEN, DON	1	R01 GM31674-01	100,201	2	06-83	BBCA		21100
EDGAR, ROBERT S	5	R01 GM28311-02	134,531	1	08-83	GEN		21700
EDGELL, MARSHALL H	1	R01 GM30180-01	86,400	2	01-83	MGN		21600
EDGELL, MARSHALL H	5	R01 GM21313-08	172,676	0	11-82	MGN		21600
EDMONDS, PETER D	5	R01 GM28562-02	139,458	1	01-83	RNM		12910
EDMONDSON, DALE E	1	R01 GM29433-01A1 HL	145,307	4	06-83	BIO	1	22400
EGOROV, IGOR K	5	R01 GM28017-03	226,236	0	08-83	MGN		21750
EHRLICH, H PAUL	2	R01 GM25561-04A1	69,409	2	03-83	SAT		13420
EHRLICH, H PAUL	5	R01 GM28689-02	63,363	1	12-82	SAT		13420
EHRLICH, MELANIE	5	R01 GM26986-03	46,947	0	08-83	BIO		21250

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
EICHER, EVA M	2	R01 GM20919-09	227,942	4	06-83	MGN		21600
EICHLER, DUANE C	5	R01 GM29162-02	58,763	1	03-83	BIO		21320
EISENBERG, DAVID S	5	R01 GM16925-14	176,839	1	04-83	BBCB		22550
EISENBERG, DAVID S	5	P41 GM29786-03	20,181	0	08-83	SSS		12900
EISENBERG, MOISES	5	R01 GM27756-03	48,272	0	03-83	BBCB		22300
EISENMAN, GEORGE	2	R01 GM24749-13	78,096	4	06-83	PHY		22300
EISENSTADT, JEROME M	5	R01 GM21873-08	220,710	2	01-83	MGN		21280
ELGIN, SARAH C	5	R01 GM30273-02	186,840	3	06-83	GEN		21600
ELLINGSON, JOHN S	5	R01 GM23807-05	75,112	1	08-83	CTY		22200
ELLIOTT, ROSEMARY W	5	R01 GM24265-05	53,679	1	08-83	MGN		21480
ELLIOTT, ROSEMARY W	5	R01 GM28464-02	107,770	3	11-82	MGN		21480
ELLIS, PAUL D	5	R01 GM26295-03	61,780	0	11-82	BMT		11920
ELSEVIERS, DIRK	5	R01 GM24576-05	77,943	1	12-82	MG		21320
ELSON, ELLIOT L	1	R01 GM30299-01	106,254	2	01-83	MBY		22300
ELSON, ELLIOT L	5	R01 GM27160-03	117,174	1	11-82	MBY		22300
ELSTON, ROBERT C	5	R01 GM28356-03	102,527	1	11-82	GEN		21400
ELWYN, DAVID H	5	R01 GM26396-04	105,491	0	07-83	NTN		13420
EMERSON, CHARLES P, JR	2	R01 GM26706-04	148,527	4	07-83	GEN		21600
EMERY, THOMAS F	5	R01 GM26711-03	48,121	0	02-83	BMT		11930
EMMONS, SCOTT W	5	R01 GM29178-02	122,087	1	03-83	GEN		21700
ENFIELD, FRANKLIN D	5	R01 GM16074-14	76,160	0	08-83	GEN		21800
ENGEL, ROBERT R	5	R01 GM26988-03	88,108	0	12-82	MCHA		21100
ENGELMAN, DONALD M	5	R01 GM29243-02	92,857	1	12-82	BBCB		22550
ENGELS, WILLIAM R	1	R01 GM30948-01	75,640	2	06-83	GEN		21780
ENGLANDER, S WALTER	5	R01 GM29272-02	50,709	2	08-83	PC		21100

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
ENGLUND, PAUL T	5	R01 GM27608-14	162,126	2	12-82	BIO		21200
ENKE, CHRISTIE G	5	R01 GM28254-03	64,995	0	06-83	SSS		12840
EPSTEIN, CHARLES J	2	R01 GM24309-06	125,119	4	07-83	MGN		21480
EPSTEIN, WILLIAM W	5	R01 GM26245-03	67,755	0	11-82	MCHA		11940
EPSTEIN, WOLFGANG	5	R01 GM22323-08	111,189	2	08-83	MBC		22300
EPSTEIN, WOLFGANG	5	R01 GM23016-07	58,015	0	08-83	MG		21200
ERICKSON, HAROLD P	5	R01 GM28553-02	69,806	1	04-83	MBY		22250
ERMAN, JAMES E	5	R01 GM18648-11	64,575	0	07-83	BIO		22450
ERNST, VIVIAN G	1	R01 GM29165-01	86,182	2	08-83	BIO		21320
ERREDE, BEVERLY J	1	R01 GM30619-01	95,778	2	06-83	GEN		21780
ESPOSITO, MICHAEL S	5	R01 GM29002-03	137,460	2	07-83	GEN		21600
ESPOSITO, ROCHELLE E	5	R01 GM29182-02	155,587	3	03-83	GEN		21700
ESTABROOK, RONALD W	5	R01 GM16488-15	161,515	0	08-83	PTR		11360
ETZLER, MARILYNN E	5	R01 GM21882-08	71,750	0	01-83	PC		11920
EVANS, DAVID A	2	R01 GM26111-07	138,481	3	03-83	MCHA		11910
EVANS, RONALD M	2	R01 GM26444-04	145,366	2	03-83	MBY		21750
EWENS, WARREN J	5	R01 GM21135-09	23,450	0	06-83	GEN		21800
EYRING, EDWARD M	5	R01 GM12862-17	75,734	0	11-82	BBCA		22500
FALK, CATHERINE T	5	R01 GM29177-02	96,225	1	03-83	MGN		21480
FALLER, JOHN W	5	R01 GM28792-05	57,363	0	03-83	BMT		11930
FAN, DAVID P	5	R01 GM19483-12	101,937	0	12-82	MBC		22300
FANGMAN, WALTON L	5	R01 GM18926-11	149,898	3	12-82	GEN		21600
FARABAUGH, PHILIP J	5	R01 GM29480-02	106,097	1	08-83	GEN		21780

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
FARBER, ROSANN A	2	R01 GM24778-04A1	98,744	2	08-83	MGN		21200
FARLEY, ROBERT A	1	R01 GM28673-01A1	71,547	2	03-83	PB		22300
FARMER, STEPHEN R	5	R01 GM29630-02	92,047	1	06-83	MBY		22250
FARRELL, KEVIN W	2	R01 GM26732-04	101,504	2	06-83	CBY		22250
FARRON-FURSTENTHAL, F	5	R01 GM28699-03	68,408	0	04-83	MBY		21600
FASMAN, GERALD D	5	R01 GM17533-21	157,322	0	12-82	BBCA		21600
FEE, JAMES A	5	R01 GM21519-08	118,056	2	11-82	BMT		22400
FEENEY, ROBERT E	2	R01 GM23817-18	78,919	3	05-83	PC		22500
FEHER, GEORGE	5	R01 GM13191-18	169,650	3	06-83	BBCA		22500
FEINSTEIN, MAURICE B	2	R01 GM17536-13	112,803	4	12-82	PHY		13200
FELDHOFF, RICHARD C	1	R01 GM29434-01A1	62,220	2	07-83	PBC		11850
FELDMAN, DAVID	5	R01 GM28825-09	115,277	2	08-83	END		11770
FELDMAN, MARCUS W	5	R01 GM28016-03	87,172	0	06-83	GEN		21800
FENNA, ROGER E	5	R01 GM26767-03	41,819	0	11-82	BBCB		22550
FENSELAU, CATHERINE C	5	R01 GM21248-08	115,400	0	06-83	SSS		11940
FERAMISCO, JAMES R	5	R01 GM28277-03	79,165	0	06-83	CBY		22250
FERGUSON-MILLER, SHELAGH M	2	R01 GM26916-04	90,364	4	06-83	PB		22450
FERGUSON, KAREN A	5	R01 GM26600-03	71,388	0	06-83	PC		22300
FERRY, JOHN D	5	R01 GM21652-08	46,944	1	12-82	BBCB		22500
FIAT, DANIEL	5	R01 GM24813-03	79,196	0	11-82	BBCB		22500
FIAT, DANIEL	3	R01 GM24813-03S1	19,071	0	11-82	BBCB		22500
FIFE, THOMAS H	5	R01 GM16564-14	60,121	0	03-83	BIO		22400
FIGURSKI, DAVID H	2	R01 GM26863-04	105,465	2	08-83	MG		21750
FIGURSKI, DAVID H	5	R01 GM29085-02 AI	103,523	1	03-83	MG		21750
FILLINGAME, ROBERT H	5	R01 GM23105-07	76,940	1	06-83	MBC		22450

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
FILLINGAME, ROBERT H	3	R01 GM23105-07S1	36,922	1	06-83	MBC		22450
FINCK, A DONALD	5	R01 GM26407-03	88,744	0	03-83	NEUA		13200
FINK, B RAYMOND	5	R01 GM27678-03	127,370	0	03-83	SAT		13200
FINK, GERALD R	7	R01 GM31802-01	37,118	3	11-82	MBY		21750
FINKELSTEIN, ALAN	5	R01 GM29210-05	183,777	3	12-82	PHY		22300
FINKELSTEIN, DAVID B	2	R01 GM25829-04A1	79,986	2	08-83	MBY		21750
FINNERTY, VICTORIA M	5	R01 GM23736-06	118,333	1	03-83	GEN		21320
FINNERTY, WILLIAM R	5	R01 GM29086-02	58,551	1	02-83	MG		21480
FIRTEL, RICHARD A	1	R01 GM30693-01	102,948	4	03-83	GEN		21750
FIRTEL, RICHARD A	5	R01 GM24279-06	192,393	2	08-83	MBY		21750
FISHER, HARVEY F	2	R01 GM15188-15A1	95,366	4	03-83	BIO		22400
FISHER, JED F	5	R01 GM28339-03	50,325	0	06-83	PB		22400
FISHER, KNUTE A	5	R01 GM27049-03	79,477	0	01-83	MBY		22300
FISHER, PAUL A	1	R01 GM30245-01	130,502	2	01-83	CTY		22300
FISHER, RONALD R	5	R01 GM22070-08	118,091	3	07-83	PB		22450
FIXMAN, MARSHALL	5	R01 GM27945-04	124,004	3	06-83	BBCB		22600
FLEMING, GRAHAM R	5	R01 GM27825-03	72,934	0	03-83	BBCA		22500
FLEMING, PATRICK J	5	R01 GM27695-03	54,582	0	03-83	BIO		22400
FLEMING, WILLIAM W	9	R01 GM29840-14	106,591	3	12-82	PHRA		11770
FLOSS, HEINZ G	5	R01 HL GM18852-12	134,617	2	08-83	BIO		11920
FLOSS, HEINZ G	5	R01 GM29784-14	103,921	1	08-83	BNP		11910
FLYNN, JOHN T	5	R01 GM28023-03	49,545	0	08-83	SAT		13420
FOGEL, SEYMOUR	2	R01 GM17317-13	112,734	4	04-83	GEN		21200
FOOTE, CHRISTOPHER S	5	R01 GM20080-10	69,752	0	05-83	BBCA		11920
FORBUSH, BLISS, III	5	R01 GM27920-03	89,938	0	03-83	BIO		22300

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
FORD, DOUGLAS J	5	R01 GM28155-03	80,667	0	06-83	PHRA		13200
FOREST, CHARLENE L	5	R01 GM27969-03	68,834	0	07-83	CBY		22200
FORMAN, DAVID S	1	R01 GM30450-01	57,855	2	04-83	CBY		22250
FORSTER, FRED K	1	R01 GM31088-01	141,363	2	07-83	RNM		12910
FORSTER, LESLIE S	1	R01 GM30017-01	31,560	2	03-83	BBCA		22500
FORSYTH, JAMES M	5	R01 GM27364-02	134,898	0	01-83	SSS		12840
FOURNIER, MAURILLE J, JR	5	R01 GM19351-11	82,311	0	05-83	PC		21320
FOURNIER, RAYMOND E	2	R01 GM26449-04 CA	133,609	2	03-83	MGN		21480
FOWLER, ELIZABETH F	5	R01 GM25864-03	84,273	0	11-82	MBY		21600
FOX, JAY W	1	R01 GM31289-01	44,990	2	07-83	TOX		11790
FOX, THOMAS D	5	R01 GM29362-02	122,946	1	08-83	GEN		21280
FRAENKEL, DAN G	5	R01 GM21098-09	127,632	0	07-83	MBC		22400
FRALICK, JOE A	5	R01 GM22238-06	43,388	0	08-83	MBC		21200
FRANCKE, UTA	2	R01 GM26105-05 HD	171,480	4	06-83	MGN		21480
FRANK, JOACHIM	1	R01 GM29169-01A1	121,823	2	03-83	SSS		12930
FRANK, LEONARD	5	R01 GM11105-20	135,323	0	05-83	BIO		22400
FRANKEL, JACK S	1	R01 GM30347-01	47,373	2	08-83	GEN		21700
FRANKLIN, DEAN	5	R01 GM29153-02	84,739	1	03-83	RNM		12910
FRAUENFELDER, HANS	5	R01 GM18051-11	129,182	2	05-83	BBCB		22600
FREED, JACK H	2	R01 GM25862-04	138,293	3	11-82	BBCB		22300
FREEDMAN, JEFFREY C	5	R01 GM28839-03	39,665	0	07-83	PHY		22300
FREELING, MICHAEL	5	R01 GM21734-08	94,489	3	01-83	GEN		21700
FREELING, MICHAEL	5	R01 GM28600-02	59,773	1	02-83	GEN		21600
FREEMAN, GARY L	2	R01 GM20024-09 HD	71,943	2	06-83	CBY		22200
FREIFELDER, DAVID M	5	R01 GM14358-16	74,442	0	11-82	MBC		21280

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
FREIRE, ERNESTO	7	R01 GM30819-01	35,620	0	12-82	BBCB		22300
FRERMAN, FRANK E	5	R01 GM25486-04	91,312	0	12-82	BIO		22400
FREUNDLICH, MARTIN	2	R01 GM17152-14	96,569	2	08-83	MG		21750
FREY, PERRY A	5	R01 GM30480-02	99,462	3	06-83	PB		22400
FREY, TERRENCE G	5	R01 GM28750-02	82,101	1	03-83	BBCB		12930
FRIDOVICH, IRWIN	5	R01 GM10287-20	177,996	1	08-83	BIO		22400
FRIEDMAN, STANLEY	5	R01 GM27787-02	60,312	0	03-83	MBC		21100
FRIEDMANN, THEODORE	5	R01 GM28223-03	166,362	0	07-83	MGN		21400
FRISTROM, JAMES W	5	R01 GM29354-02	101,786	1	07-83	GEN		21700
FRISTROM, JAMES W	5	R01 GM19937-10	107,033	0	12-82	GEN		21700
FRIZZELL, LEON A	5	R01 GM28253-03	87,072	0	08-83	SSS		12910
FROMMER, GABRIEL P	5	R01 GM29254-02	26,597	0	01-83	BPNB		13700
FRUTON, JOSEPH S	5	R01 GM18172-12	105,689	2	05-83	BIO		22400
FRYDMAN, BENJAMIN J	5	R01 GM11973-17	14,900	1	08-83	BMT		11760
FUCHS, JAMES A	5	R01 GM20884-09	88,271	0	08-83	MG		22400
FUJIMOTO, JAMES M	5	R01 GM16503-14	61,961	2	11-82	PHRA		11850
FULCO, ARMAND J	2	R01 GM23913-05A1	114,543	3	07-83	PB		22400
FULTON, CHANDLER M	5	R01 GM24444-05	141,417	0	03-83	CBY		22250
FUNK, MAX O	5	R01 GM28576-02	20,560	0	11-82	SSS		12820
FUNK, RAYMOND L	5	R01 GM28663-02	66,795	2	11-82	BNP		11910
FURTH, JOHN J	5	R01 GM10390-19	117,853	0	07-83	PC		21750
FYRBERG, ERIC A	5	R01 GM29357-02	61,398	1	06-83	GEN		21700
GAFFNEY, BETTY J	F	R01 GM28070-09	88,170	0	04-83	BBCA		22300

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
GAFFNEY, THOMAS E	*5	P50 GM20387-10	553,453	0	01-83	PTR		11300
GALAU, GLENN A	5	R01 GM29495-02	46,144	1	06-83	MBY		21320
GALL, JOSEPH G	5	R01 GM12427-19	197,276	1	08-83	MBY		21600
GALLANT, JONATHAN A	5	R01 GM13626-16	88,126	1	04-83	MBC		21320
GAMELLI, RICHARD L	5	R23 GM29371-02	52,031	1	07-83	SAT		13450
GANDER, JOHN E	2	R01 GM19978-09	103,102	4	08-83	MBC		22410
GANDOUR, RICHARD D	5	R01 GM29128-02	56,645	1	03-83	BNP		11920
GANEM, BRUCE	5	R01 GM24054-05	104,089	1	12-82	BNP		11910
GANESAN, ADAYAPALAM T	5	R01 GM14108-17	129,367	2	07-83	MG		21200
GANESAN, ANN K	5	R01 GM19010-11	110,617	0	07-83	MBC		21200
GANN, DONALD S	2	R01 GM27946-03	201,971	4	06-83	SAT		13420
GARBERS, DAVID L	5	R01 GM24290-05	102,630	0	12-82	BIO		22400
GARDINER, JOSEPH C	5	R01 GM28030-03	10,650	0	06-83	SSS		13901
GARDNER, JEFFREY F	5	R01 GM28717-02	81,548	1	11-82	MG		21750
GAREN, ALAN	5	R01 GM24764-05	113,905	3	12-82	GEN		21700
GARFINKEL, DAVID	5	R01 GM16501-12	104,970	0	03-83	SSS		12100
GARLID, KEITH D	1	R01 GM31086-01	117,831	2	06-83	PB		22450
GARRARD, WILLIAM T	5	R01 GM22201-08	75,283	0	04-83	CTY		21600
GARRARD, WILLIAM T	1	R01 GM29935-01	113,840	2	01-83	CTY		21600
GASSMAN, PAUL G	2	R01 GM22346-06	61,125	1	11-82	MCHA		11940
GATTI, RICHARD A	5	R01 GM29788-03	118,962	0	08-83	MGN		21400
GAY, HELEN	5	R01 GM10499-18	62,329	0	06-83	GEN		21600
GEER, BILLY W	5	R01 GM28779-02	68,981	1	03-83	GEN		21800
GEIDUSCHEK, E PETER	5	R01 GM18386-13	228,576	2	08-83	MG		21750
GEISSER, SEYMOUR	5	R01 GM25271-05	60,878	1	07-83	SSS		12100

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
GELBART, WILLIAM M	5	R01 GM23522-06	64,420	0	12-83	GEN		21320
GELBART, WILLIAM M	5	R01 GM28669-02	94,725	2	11-82	GEN		21700
GELFAND, JEFFREY A	5	R23 GM28591-02	53,811	1	11-82	SAT		13450
GEORGOPOULOS, CONSTANTINE P	5	R01 GM23917-06	124,951	2	03-83	MBC		21200
GERACE, LARRY R	5	R01 GM28521-02	78,308	1	11-82	CBY		22300
GERBI, SUSAN A	2	R01 GM20261-09	138,784	4	03-83	MBY		21320
GEREN, COLLIS R	5	R01 GM24173-06	57,399	0	06-83	TOX		11790
GERHART, JOHN C	5	R01 GM19363-19	161,939	1	08-83	REB		22200
GERIG, JOHN T	2	R01 GM25975-04	98,425	2	08-83	BBCB		22500
GERLT, JOHN A	1	R01 GM30562-01	70,299	2	08-83	BBCA		21100
GERLT, JOHN A	2	R01 GM22350-07	122,198	2	06-83	BIO	1	22400
GETZ, GODFREY S	5	R01 GM18858-10	130,737	1	12-82	MBY		22300
GETZ, MICHAEL J	2	R01 GM25510-04	123,220	2	03-83	MBY		21600
GIACOMONI, DARIO	5	R01 GM27935-03	85,725	0	11-83	MBY		21320
GIBBONS, IAN R	9	R01 GM30401-06	117,362	4	03-83	CBY		22250
GIBBONS, WILLIAM A	5	R01 HD GM28826-08	102,979	2	06-83	BBCB		11930
GIBBS, JULIAN H	5	R01 GM27951-04	66,704	0	08-83	BBCB		22600
GIBSON, DAVID T	1	R01 GM29909-01	114,323	4	11-82	MBC		22400
GIBSON, QUENTIN H	5	R01 AI GM14276-18	143,108	1	05-83	BMT		22400
GIDDINGS, J CALVIN	2	R01 GM10851-25	127,587	4	01-83	BMT		12820
GILBERT, HIRAM F	2	R01 GM25347-04	65,800	2	11-82	PB		22400
GILBERT, JOHN C	1	R01 GM29972-01A1	78,697	2	07-83	MCHA		11910
GILBERT, WALTER	5	R01 CA GM21514-08	85,576	0	11-82	MBC		21600
GILBERT, WALTER	2	R01 GM09541-21	357,728	1	07-83	GEN		21750
GILES, NORMAN H	5	R01 GM28777-03	208,187	3	06-83	GEN		21750

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
GILHAM, P T	2	R01 GM19395-11	96,556	4	04-83	BIO		21100
GILHAM, PETER T	5	R01 GM11518-18	68,917	1	06-83	BIO		21100
GILL, D MICHAEL	5	R01 GM28482-02	85,021	3	12-82	MBY		21200
GILL, STANLEY J	5	R01 GM25889-03	57,476	0	11-82	BBCA		21100
GILLESPIE, DAVID H	5	R01 GM27270-03	126,038	0	12-82	MGN		21800
GILVARG, CHARLES	5	R01 GM29244-03	59,908	0	08-83	MBC		22300
GIVENS, RICHARD S	5	R01 GM16611-12	54,008	0	11-82	MCHA		11940
GLADYSZ, JOHN A	7	R01 GM31280-01	39,066	0	06-83	BMT		11940
GLAESER, ROBERT M	2	R01 GM23325-07	371,438	3	06-83	SSS	3	12930
GLASER, EDMUND M	5	R01 GM27165-02	78,325	0	12-82	SB		12990
GLASER, GAD	5	R01 GM25286-05	50,881	1	07-83	MG		21750
GLASER, LUIS	5	P01 GM28002-03	124,865	0	07-83	SSS		22300
GLASER, LUIS	5	R01 GM18405-11	158,872	1	04-83	PBC		22300
GLASER, MICHAEL	5	R01 GM21953-08	112,598	3	12-82	CTY		22300
GLASS, DAVID B	5	R01 GM28144-03	74,044	0	06-83	PC		22400
GLASS, JOHN D	2	R01 GM18752-09A1	115,342	2	08-83	MCHA		11440
GLICKSON, JERRY D	5	R01 GM24852-03	57,170	0	11-82	BBCA		22500
GLUECKSOHN-WAELSCH, SALOME	5	R01 GM27250-27	240,470	0	03-83	MGN		21700
GOAD, WALTER B	1	R13 GM01628-01	3,000	0	07-83	SRC		21600
GODLESKI, STEPHEN A	5	R01 GM27328-03 JF	60,895	0	11-82	BMT		11910
GOFF, HAROLD M	5	R01 GM28831-03	43,155	0	07-83	BMT		22400
GOKEL, GEORGE W	5	R01 GM29150-02	52,269	0	05-83	MCHA		11920
GOKEL, GEORGE W	5	R01 GM29706-02	61,644	0	11-82	MCHA		22300
GOLD, LAWRENCE M	5	R01 GM28685-02	166,408	3	11-82	PC		21320
GOLD, LAWRENCE M	5	R01 GM28755-02	56,431	0	11-82	SSS		21320

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
GOLD, LAWRENCE M	5	R01 GM19963-10	169,659	0	12-82	VR		21750
GOLDBERG, EDWARD B	2	R01 GM13511-17	144,447	4	11-82	MBC		21320
GOLDBERG, IRVING H	2	R01 GM12573-18	294,984	4	12-82	PC		11770
GOLDBERG, LEON I	2	P01 CA GM22220-06	351,662	2	11-82	PTR		11700
GOLDBERG, NELSON D	5	R01 GM28818-17	203,887	1	07-83	SSS		22400
GOLDMAN, EMANUEL	5	R01 GM27711-03	84,648	0	03-83	MBC		21320
GOLDSMITH, MARIAN R	5	R01 GM29252-02	74,390	0	08-83	GEN		21600
GOLDSMITH, WERNER	5	R01 GM29280-02	59,611	3	06-83	AFY		12320
GOLDSTEIN, IRWIN J	5	R01 GM29470-17	104,463	3	03-83	ALY		22410
GOLDSTEIN, JACOB H	5	R01 GM10848-26	106,721	3	08-83	BBCB		22500
GOLDSTEIN, RICHARD	5	R01 GM27143-03	51,108	0	11-82	VR		21320
GOLLUB, EDITH G	5	R01 GM26998-03	79,240	0	02-83	GEN		21280
GOOD, IRVING J	5	R01 GM18770-10	110,929	2	11-82	SSS		12100
GOODENOUGH, DANIEL A	5	R01 GM28932-02	113,250	1	03-83	CTY		22300
GOODENOUGH, DANIEL A	5	R01 GM18974-11	90,062	0	12-82	BBCA		22300
GOODENOUGH, URSULA W	1	R01 GM30982-01	58,725	2	06-83	CTY		22200
GOODENOUGH, URSULA W	2	R01 GM26150-04	160,610	4	03-83	CP		22200
GOODGAL, SOL H	5	R01 GM24915-21	134,231	2	06-83	MBC		21200
GOODMAN, MURRAY	2	R01 GM18694-09A1	84,874	2	03-83	BBCA		22500
GOODMAN, MYRON F	5	R01 GM21422-07	126,554	3	08-83	MG		21250
GOODMAN, REBA	1	R01 GM29722-01	107,237	2	08-83	GEN		21700
GOORHA, RAKESH M	5	R01 AG GM23638-06	91,209	0	06-83	VR		21200
GORDON, JULIUS A	5	R01 GM27509-03	42,240	0	08-83	CBY		22300
GORENSTEIN, DAVID G	5	R01 GM17575-11	75,288	2	12-82	BBCB		22400
GOROVSKY, MARTIN A	5	R01 GM21793-08	194,205	2	01-83	GEN		21600

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
GOROVSKY, MARTIN A	5	R01 GM26973-04	137,722	0	06-83	MBY		22250
GOSS, STEPHEN A	1	R01 GM30593-01	62,703	2	06-83	RNM		12910
GOSSELIN, ROBERT E	5	R01 GM11598-18	52,222	0	05-83	PHRA		11770
GOTS, JOSEPH S	5	R01 GM29500-27	113,289	3	05-83	BIO		22400
GOTTESFELD, JOEL M	2	R01 GM26453-04	159,205	2	07-83	GEN		21600
GOULD, STEVEN J	2	R01 GM25996-04	94,395	2	11-82	BNP		11910
GOULD, STEVEN J	5	R01 GM28990-02	50,561	1	03-83	BNP		11920
GRAFF, GUSTAV	5	R01 GM28894-03	74,867	0	07-83	BIO		22400
GRAINGER, ROBERT M	5	R01 GM24430-05	104,738	1	12-82	GEN		21600
GRAINGER, ROBERT M	5	R01 GM26139-03	71,080	0	08-83	GEN		21700
GRANT, DAVID M	5	R01 GM08521-22	111,758	0	05-83	BBCB		12840
GRANT, GREGORY A	5	R01 GM27784-02	69,800	1	01-83	PC		22400
GRAVES, DONALD J	5	R01 GM09587-21	85,955	2	12-82	BIO		22400
GRAY, DONALD M	2	R01 GM19060-10A1	96,947	4	06-83	BBCA		21100
GRAY, HORACE B, JR	5	R01 GM21839-08	77,878	1	03-83	BIO		21200
GRAY, ROBERT D	5	R01 GM25738-03	52,759	0	06-83	BMT		11860
GRAY, WILLIAM R	5	R01 GM24686-05	108,683	1	03-83	BIO		22400
GREEN, MARK R	5	R01 GM28497-02	64,602	0	11-82	MCHB		11940
GREEN, MELVIN M	5	P01 GM22221-08	460,217	2	07-83	SSS		21700
GREEN, MICHAEL	5	R01 GM28194-03	98,883	0	08-83	MBY		22300
GREEN, PHILIP S	1	R01 GM30890-01	84,994	2	07-83	RNM		12910
GREEN, TERRENCE R	1	R01 GM29335-01A1	42,007	2	04-83	SSS		22450
GREENBAUM, IRA F	5	R01 GM27014-03	58,480	0	02-83	MGN		21800
GREENBERG, G ROBERT	5	R01 GM25973-03	87,743	0	11-82	PC		22300
GREENBERG, G ROBERT	5	R01 GM29025-02	93,750	3	03-83	MG		22500

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
GREENBERG, JAY R	5	R01 GM28697-02	82,961	1	02-83	MBY		21320
GREENE, PATRICIA J	2	R01 GM25729-04	65,500	2	11-82	BIO		21100
GREENE, RONALD C	5	R01 GM10317-18	50,187	0	08-83	PC		21750
GREENFIELD, MOSES A	5	R01 GM22338-06	32,987	0	11-82	RNM		12910
GREENLEAF, ARNO L	5	R01 GM28078-03	127,731	2	06-83	GEN		21310
GREENSPAN, RALPH J	1	R01 GM31104-01	117,471	2	06-83	GEN		21700
GREENWALD, A SETH	5	R01 NS GM29785-02	18,500	0	12-82	AFY		12300
GREER, HELEN A	2	R01 GM25207-04	148,365	2	11-82	GEN		21750
GREGG, JAMES H	5	R01 GM10138-20	71,117	0	12-82	CBY		22200
GRIFFIN, ROBERT C	2	R01 GM23289-07	131,874	2	06-83	BBCB		22500
GRIFFIN, ROBERT G	5	R01 GM23403-06	112,700	1	04-83	BBCB		22500
GRIFFIN, ROBERT G	5	R01 GM25505-05	97,825	2	06-83	BBCB		22500
GRIFFITH, O HAYES	5	R01 GM25698-16	133,944	0	05-83	BBCA		22300
GRINDLEY, NIGEL D	5	R01 GM28470-03	132,556	3	06-83	MG		21780
GRINDLEY, NIGEL D	5	R01 GM28550-03	94,791	0	04-83	MBC		21200
GRONERT, GERALD A	5	R01 GM21729-23	124,979	2	11-82	SAT		13200
GROSS, ELIZABETH L	1	R01 GM30560-01	73,452	2	04-83	BBCA		22500
GROSS, KENNETH W	1	R01 GM30248-01	106,306	2	01-83	MGN		21480
GROSS, MARTIN	5	R01 GM24949-05	91,009	3	08-83	PBC		21320
GROSS, PAUL R	5	R13 GM31136-04	95,933	1	12-82	CMBD		22300
GROSS, SAMSON R	5	R01 GM28331-03	129,081	2	07-83	MBY		21750
GROSSMAN, JEFFREY E	1	R01 GM31066-01	61,396	1	07-83	SAT		13410
GROSSMAN, LAWRENCE	1	R01 GM31110-01	134,363	4	06-83	BIO	1	21400
GROSSMAN, LAWRENCE	5	R01 GM22846-08	103,646	1	08-83	PC		21200
GROSSMAN, LAWRENCE I	2	R01 GM26546-05	298,710	2	08-83	GEN		21280

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
GROSSWEINER, LEONARD I	2	R01 GM20117-19	86,472	2	04-83	BBCA		11920
GROVES, JOHN T	2	R01 GM25923-04	122,575	3	11-82	PB		11760
GRUENER, RAPHAEL P	5	R01 GM27353-03	34,444	0	05-83	SAT		13200
GRUNDY, BETTY L	5	R23 GM27942-03	45,338	0	10-82	SGYA		13250
GRUNEWALD, GARY L	2	R01 GM22988-07	60,235	2	06-83	BNP		11770
GRUNSTEIN, MICHAEL	5	R01 GM23674-06	115,554	2	12-82	MBY		21600
GUARENTE, LEONARD P	1	R01 GM30454-01	90,804	2	04-83	GEN		21750
GUILD, GREGORY M	5	R01 GM28228-03	110,026	0	06-83	GEN		21700
GUILD, WALTER R	5	R01 GM21887-07	67,191	1	06-83	MBC		21780
GUILFOYLE, THOMAS J	5	R01 GM24096-06	68,729	1	07-83	CTY		21700
GUILLORY, RICHARD J	5	R01 GM24348-04	49,899	1	03-83	PB		22400
GUILLORY, RICHARD J	5	R01 GM27857-03	65,510	1	03-83	BIO		22450
GUINEY, DONALD G	5	R01 GM28924-03	61,647	0	08-83	MG		21280
GUMP, FRANK E	2	R01 GM26433-04	157,121	2	03-83	SAT		13420
GUMPORT, RICHARD I	2	R01 GM25621-04	101,453	4	11-82	MG		21200
GUNN, ROBERT B	5	R01 GM30754-02	115,104	0	08-83	PHY		22300
GUNSALUS, IRWIN C	5	R01 GM21161-08	88,876	2	11-82	BIO		22500
GUNSALUS, ROBERT P	5	R01 GM29456-02	77,134	1	08-83	MG		21750
GUPTA, NABA K	5	R01 GM22079-08	89,983	3	04-83	BIO		21320
GUPTA, NABA K	5	R01 GM18796-11	69,767	0	11-82	BIO		21320
GURIN, SAMUEL	5	R01 GM22744-07	30,908	0	03-83	BIO		11910
GURNEY, THEODORE, JR	5	R01 GM26137-03	64,433	0	11-82	MBY		21750
GUSTAFSON, GARY L	1	R01 GM30219-01	79,013	2	12-82	CBY		22300
GUTERMAN, SONIA K	5	R01 GM24461-06	77,328	0	03-83	MBC		21310
GUTHRIE, CHRISTINE	5	R01 GM21119-09	113,689	2	01-83	GEN		21320

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
GUTKNECHT, JOHN W	5	R01 GM28844-02	47,250	1	03-83	PHY		22300
GUTSCHE, C DAVID	5	R01 GM23534-06	75,874	0	12-82	SSS		11920
GUYNN, ROBERT W	2	R01 GM26488-04	81,424	2	03-83	BIO		22400
HABER, JAMES E	5	R01 GM20056-10	125,874	3	12-82	GEN		21700
HABER, JAMES E	1	R01 GM29736-01	41,858	2	03-83	GEN		21200
HACKENBROCK, CHARLES R	5	R01 GM28704-02	82,364	2	11-82	PB		22300
HACKERT, MARVIN L	1	R01 GM30105-01 AI	67,105	2	01-83	BBCB		22550
HACKERT, MARVIN L	5	R01 GM23306-07	45,348	0	06-83	BBCB		22550
HAGEMAN, JAMES H	5	R01 GM19643-09	55,725	0	11-82	BIO		22400
HAGER, LOWELL P	5	R01 GM07768-23	116,504	0	08-83	BIO		22400
HAGERMAN, PAUL J	5	R01 GM28293-03	46,471	0	06-83	BBCA		21100
HAGLER, ARNOLD T	1	R01 GM30564-01	140,404	2	04-83	BBCA		22600
HAGLER, ARNOLD T	7	R01 GM30793-01 CA	58,692	1	12-82	BBCA		22600
HAGUE, DONALD R	1	R01 GM28744-01A1	56,327	2	07-83	PC		21320
HAIMO, LEAH T	5	R01 GM28886-02	55,050	1	03-83	CBY		22250
HAKOMORI, SEN-ITIROH	5	R01 GM23100-06	75,687	3	02-83	CP		22300
HALEY, BOYD E	5	R01 GM21998-08	105,715	3	02-83	PC		21100
HALL, BENJAMIN D	5	R01 GM11895-19	133,539	2	04-83	GEN		21750
HALL, CAROLE L	5	R01 GM25494-05	78,570	1	06-83	PB		22450
HALL, DWIGHT H	5	R01 GM24455-06	83,480	0	02-83	MBC		21750
HALL, JAMES E	9	R01 GM30657-04A1	71,631	2	03-83	PHY		22300
HALL, JEFFREY C	5	R01 GM21473-08 HL	71,056	0	11-82	GEN		21400
HALL, STAN S	5	R01 GM25727-03	53,308	0	06-83	BMT		11930

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
HALLICK, RICHARD B	2	R01 GM21351-09	84,107	4	06-83	MBY		21280
HALLICK, RICHARD B	5	R01 GM28463-02	83,112	1	11-82	GEN		21280
HALPERIN, MAX	5	R01 GM26012-02	56,147	0	11-82	SSS		13700
HALPERIN, MAX	1	R01 GM29999-01	46,051	1	01-83	SSS		12100
HALVORSON, HARLYN O	1	R01 GM30707-01	110,635	2	04-83	BIO		21750
HALVORSON, HARLYN O	5	R01 GM18904-11	138,010	2	12-82	MBC		21750
HALVORSON, HERBERT R	5	R01 GM23302-06	78,305	0	01-83	BBCB		22500
HAMILTON, ANDREW E	5	R01 GM27965-03	60,999	0	06-83	MGN		21800
HAMILTON, GORDON A	5	R01 GM27083-03	46,098	0	11-82	BIO		22400
HAMILTON, JEAN A	2	R01 GM24623-04	55,094	2	03-83	BBCA		22550
HAMILTON, MARY G	5	R01 GM24981-03	67,791	0	12-82	BBCA		21320
HAMLIN, JOYCE L	2	R01 GM26108-04	120,311	2	11-82	SSS		21200
HAMMES, GORDON G	5	R01 GM13292-18	213,925	2	11-82	BBCA		22400
HAMORI, EUGENE	5	R01 GM20008-07	27,189	0	03-83	BBCA		21100
HAMPEL, ARNOLD E	5	R01 GM19506-09	69,972	0	11-82	PC		21320
HANAWALT, PHILIP C	5	R01 GM09901-21	157,746	3	06-83	RAD		21250
HANLON, M SUE	1	R01 GM30284-01	55,608	1	07-83	BBCA		21100
HANNA, MICHAEL H	5	R01 GM27892-03	46,754	0	03-83	CBY		22200
HANSCH, CORWIN H	1	R01 GM30362-01 CA	106,065	2	04-83	SSS		11930
HANSON, BARBARA A	5	R01 GM28286-03	34,440	0	07-83	PC		22410
HANZLIK, ROBERT P	2	R01 GM21784-08	89,679	2	07-83	TOX		11920
HARALSON, MICHAEL A	1	R01 GM31178-01	93,987	3	07-83	PBC		21750
HARDEN, T KENDALL	5	R01 GM27820-03	104,271	2	03-83	PHRA		11770
HARDEN, T KENDALL	5	R01 GM29536-05	57,840	1	03-83	PHRA		11770
HARDING, KENN E	5	R01 GM26265-03	51,024	0	09-82	MCHA		11940

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
HARDMAN, JOEL G	5	R01 GM16811-13	151,133	2	12-82	MET		11770
HARFORD, A GAYLER	5	R01 GM21487-06	86,625	0	06-83	GEN		21600
HARI, V	1	R01 GM29408-01A1	64,634	3	08-83	MBC		21200
HARPER, ROBERT A	5	R01 GM29257-03	119,269	0	08-83	GMA		13420
HARPST, JERRY A	5	R01 GM29828-02	78,872	1	03-83	BBCA		21100
HARRIS, ALBERT K	2	R01 GM24251-06	91,938	2	08-83	CP		22250
HARRIS, HARRY	5	R01 GM27018-06	151,300	2	02-83	MGN		21400
HARRIS, THOMAS M	2	R01 GM12848-17	87,463	3	12-82	BNP		11910
HARRIS, THOMAS M	5	R01 GM23593-06	99,089	1	06-83	MCHA		11910
HARRISON, WILLARD W	5	R01 GM14569-14	60,175	0	07-83	BMT		12820
HART, DAVID J	5	R01 GM27647-03	61,895	0	03-83	MCHA		11910
HART, HAROLD	5	R01 GM15997-13	70,957	1	05-83	MCHA		11940
HARTL, DANIEL L	1	R01 GM30351-01	137,250	2	11-82	GEN		21800
HARTWELL, LELAND H	5	R01 GM17709-13	142,804	2	08-83	MBC		21700
HASCHEMEYER, RUDY H	1	R01 GM30282-01	35,826	2	01-83	BBCA		22600
HASCHEMEYER, RUDY H	5	R01 GM25152-03	74,838	0	11-82	BBCB		22300
HASELKORN, ROBERT	5	R01 GM21823-08	113,375	0	04-83	MBY		22200
HASTIE, NICHOLAS D	5	R01 GM24771-05	90,362	1	12-82	CTY		21750
HASTINGS, JOHN W	5	R01 GM19536-10	85,641	0	11-82	CBY		22200
HATEFI, YOUSSEF	5	R01 GM24887-05	110,219	3	07-83	SSS		22450
HATEFI, YOUSSEF	5	R01 GM27812-03	71,277	0	03-83	BIO		22450
HATFIELD, G WESLEY	5	R01 GM24330-05	102,745	3	11-82	BIO		21320
HATTMAN, STANLEY M	5	R01 GM26892-04	167,676	0	06-83	SSS		21100
HATTMAN, STANLEY M	5	R01 GM29227-11	97,315	0	08-83	PC		21600
HAUSER, FRANK M	5	R01 GM26574-04	61,162	1	03-83	MCHA		11910

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
HAWKRIDGE, FRED M	5	R01 GM27208-02	36,918	0	02-83	BMT		22450
HAWTHORNE, DONALD C	5	R01 GM27624-03	65,178	0	07-83	GEN		21320
HAYASHI, MASAKI	5	R01 GM12934-18	92,680	0	04-83	PC		21320
HAYES, SIDNEY	1	R01 GM30077-01	66,230	2	01-83	MG		21200
HAYNES, DUNCAN H	5	R01 GM23990-05	113,195	3	08-83	PB		22300
HAYS, JOHN B	2	R01 GM22586-07	149,796	4	08-83	MG		21200
HAYTON, WILLIAM L	5	R01 GM27924-03	42,947	0	01-84	PHRA		11850
HAZELBAUER, GERALD L	1	R01 GM29963-01	107,443	2	03-83	MBC		22300
HEARST, JOHN E	1	R01 GM30781-01	11,565	2	07-83	BBCA		21310
HEARST, JOHN E	1	R01 GM30786-01	99,330	2	07-83	MBC		21750
HEARST, JOHN E	5	R01 GM11180-19	181,016	1	06-83	BBCB		21100
HEARST, JOHN E	5	R01 GM25151-05	102,481	1	03-83	MCHA		21100
HEATHCOCK, CLAYTON H	5	R01 GM28849-02	84,019	2	02-83	BNP		11910
HEATHCOCK, CLAYTON H	1	R01 GM29815-01A1	83,828	2	08-83	BNP		11910
HECHT, NORMAN B	5	R01 GM29224-03 HL	76,586	0	08-83	REB		21750
HECHT, SIDNEY M	5	R01 GM27815-03	73,576	0	03-83	PC		21320
HECKMAN, JOYCE E	1	R01 GM29478-01	99,732	2	01-83	GEN		21280
HEDGPETH, JOE	5	R01 GM27472-03	57,752	0	12-82	MBC		22300
HEGEDUS, LOUIS S	2	R01 GM26178-04	76,324	2	03-83	BMT		11940
HEHRE, EDWARD J	2	R01 GM25478-04	132,188	4	08-83	BIO		22400
HEIMBACH, DAVID M	1	R01 GM31150-01	68,933	2	07-83	SAT		13410
HEINZ, ERICH	5	R01 GM26554-05	76,920	1	08-83	PHY		22300
HELLER, JOHN S	5	R01 GM26559-03	75,855	0	11-82	PBC		22400
HELLING, ROBERT B	5	R01 GM25565-05	68,691	0	06-83	GEN		21280
HELMKAMP, GEORGE M, JR	5	R01 GM24035-06	71,073	0	06-83	PC		22300

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
HELMSTETTER, CHARLES E	2	R01 GM26429-17	78,681	2	06-83	MBC		22200
HENDERSON, ELLEN J	5	R01 GM28887-03	54,683	0	07-83	MBY		22300
HENDRICKSON, WAYNE A	1	R13 GM30505-01	2,000	0	04-83	BBCB		22550
HENDRICKSON, WAYNE A	1	R01 GM29548-01	82,130	2	01-83	BBCB		22550
HENIKOFF, STEVEN	5	R01 GM29009-02	59,509	1	03-83	GEN		21600
HENRY, SUSAN A	5	R01 GM19629-11	232,213	3	08-83	GEN		22300
HENSLEY, PRESTON	5	R01 GM28731-02	39,650	1	11-82	BBCA		22500
HENSON, PETER M	2	R01 GM24834-06	142,028	4	06-83	ALY		13410
HEPLER, PETER K	5	R01 GM25120-06	97,230	2	08-83	CBY		22250
HEREFORD, LYNNA M	7	R01 GM31311-01	59,436	0	11-82	GEN		21700
HERMAN, ROBERT K	2	R01 GM22387-07	75,127	4	02-83	SSS		21700
HERMODSON, MARK A	5	R01 GM24602-05	108,996	3	03-83	PC		22500
HERRICK, GLENN A	5	R01 GM25203-05	115,207	1	03-83	MBY		21600
HERSCHMAN, HARVEY R	5	R01 GM24797-05	105,429	2	12-82	CTY		22200
HERSCOVICS, ANNETTE A	1	R01 GM31265-01	46,094	2	04-83	PBC		22410
HERSHEY, JOHN W	5	R01 GM22135-08	127,000	0	07-83	CTY		21320
HERTZBERG, ELLIOT L	1	R01 GM30667-01	101,276	2	04-83	CBY		22300
HERZENBERG, LEONARD A	5	R01 GM17367-13	515,173	1	12-82	SSS		12990
HERZFELD, JUDITH	2	R01 GM23316-06	98,624	3	03-83	BBCB		22300
HESS, GEORGE P	5	R01 GM04842-27	76,414	0	08-83	BIO		22300
HEUSER, JOHN E	1	R01 GM29647-01	261,494	2	11-82	SSS		12930
HEWETT, JOHN E	1	R01 GM29333-01	20,558	0	12-82	SSS		12100
HICKS, JAMES B	5	R13 GM30337-03	30,735	0	04-83	GBD		21700
HICKS, JAMES B	5	R01 GM25624-05	211,172	3	06-83	GEN		21700
HILL, CHARLES W	5	R01 GM16329-15	158,413	2	08-83	MG		21200

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
HILL, RICHARD K	5	R01 GM28236-03	61,240	0	12-82	BIO		11920
HILL, ROBERT L	5	R01 GM25766-22	241,247	0	08-83	PC		22500
HILL, WALTER E	5	R01 GM27201-03	75,908	0	12-82	BBCA		21320
HILLE, MERRILL B	5	R01 GM29792-05	65,949	1	01-83	MBY		22200
HILLMAN, RALPH	5	R01 GM18080-09	61,625	0	02-83	GEN		21700
HINKLE, DAVID C	2	R01 GM21782-07	110,927	4	05-83	BIO		21200
HINKLE, DAVID C	1	R01 GM29686-01	82,385	2	01-83	BIO		21200
HINTON, CLAUDE W	5	R01 GM16536-14	22,387	2	12-82	GEN		21250
HIRAIZUMI, YUICHIRO	2	R01 GM19770-10	120,453	2	03-83	GEN		21800
HIRSCHBERG, CARLOS B	5	R01 GM30365-08	113,087	3	07-83	MBY		22410
HIRSCHHORN, KURT	5	R01 GM28762-03	200,570	0	07-83	MGN		21400
HIRSH, DAVID I	2	R01 GM26515-04	138,798	4	03-83	GEN		21750
HIRSH, DAVID I	5	R01 GM19851-11	219,047	2	08-83	GEN		22200
HIRSH, JAY	5	R01 GM27318-03	89,374	0	12-82	MBY		21750
HITCHCOCK, SARAH E	5	R01 GM28830-06	57,584	0	08-83	CTY		22250
HJELM, REX P, JR	5	R01 GM28975-02	38,779	0	03-83	MBY		21600
HO, CHIEN	2	R01 GM26874-04	178,975	4	12-82	BBCB		22300
HO, JOHN T	5	R01 GM24590-05	54,169	0	12-82	BBCB		22300
HOCH, JAMES A	2	R01 GM19416-11	220,919	4	06-83	MG		21700
HOCHBERG, KENNETH J	5	R01 GM28336-02	19,245	0	08-83	SSS		21800
HOCHSTRASSER, ROBIN M	2	R01 GM12592-18	156,566	4	01-83	BBCA		12840
HODO, HENRY G, III	5	R01 GM27785-03	49,728	0	07-83	BIO		21310
HOFFMAN, BRIAN B	1	R01 GM31206-01	137,865	2	07-83	PHRA		11770
HOFFMANN, RICHARD J	5	R01 GM28024-02	55,948	0	11-82	GEN		21800
HOGAN, MICHAEL E	5	R01 GM29047-02	65,074	1	03-83	BBCA		21100

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
HOGENKAMP, HENRICUS P	5	R01 GM23773-07	116,574	0	08-83	BIO		11920
HOGGARD, PATRICK E	7	R01 GM30352-01	41,504	0	09-82	BMT		11920
HOGNESS, DAVID S	5	R01 GM20158-10	191,820	0	01-83	GEN		21600
HOLADAY, DUNCAN A	5	R01 GM29250-02	97,599	0	02-83	SAT		13200
HOLFORD, NICHOLAS H	5	R01 GM28072-03	73,888	0	06-83	SSS		11880
HOLLAND, MICHAEL J	2	R01 GM30307-02	80,887	4	04-83	GEN		21750
HOLLOMAN, WILLIAM K	5	R01 GM27103-03	76,412	0	12-82	GEN		21200
HOLLOWAY, PETER W	5	R01 GM23858-05	94,730	3	12-82	PB		22300
HOLM, RICHARD H	5	R01 GM28856-03	184,709	3	06-83	BMT		11920
HOLMES, ROBERT R	5	R01 GM21466-08	64,432	1	12-82	BMT		11920
HOLMES, WALTER M	2	R01 GM25871-04	94,089	4	11-82	MG		21600
HOLMQUIST, GERALD P	5	R01 GM23905-06	100,739	2	06-83	MGN		21600
HOLTZER, ALFRED M	2	R01 GM20064-08	64,589	3	02-83	BBCB		22500
HOLTZMAN, JORDAN L	5	R01 GM21310-08	78,497	0	07-83	PHRA		11760
HONG, FELIX T	5	R01 GM25144-05	64,084	0	11-82	MBY		22300
HONG, JEN-SHIANG	1	R01 GM29843-01	140,289	4	11-82	MBC		22300
HONIG, BARRY H	5	R01 GM30518-02	89,228	1	08-83	BBCA		22600
HOOKER, THOMAS M, JR	5	R01 GM18092-09	55,020	0	12-82	BBCA		22500
HOPPER, ANITA K	5	R01 GM27930-03	79,817	0	08-83	GEN		21320
HOPPER, JAMES E	5	R01 GM27925-04	119,639	1	08-83	MBY		21750
HORNBEIN, THOMAS F	5	R01 GM27069-03	63,500	0	02-83	SAT		13200
HORNER, WILLIAM H	5	R01 GM26834-03	59,862	0	03-83	PBC		22400
HORNING, EVAN C	2	P01 GM13901-17	356,557	2	07-83	SSS		12840
HOROWITZ, JACK	5	R01 GM09042-20	72,722	1	11-82	PC		21320
HOROWITZ, PAUL M	5	R01 GM25177-05	49,406	1	03-83	BBCA		22500

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
HOROWITZ, SAMUEL B	5	R01 GM19548-11	134,043	1	07-83	CP		22200
HORROCKS, WILLIAM D, JR	5	R01 GM23599-06	74,221	0	12-82	BBCA		22500
HORST, MICHAEL N	7	R01 GM30952-01	31,263	2	11-82	PBC		22410
HORTON, DEREK	5	R01 GM11976-17	109,522	0	09-83	MCHA		11910
HORTON, DEREK	5	P41 GM27431-03	18,570	0	12-82	SSS		12900
HORTON, H ROBERT	1	R01 GM28978-01A1	62,227	2	08-83	PC		22400
HORVATH, CSABA G	5	R01 GM20993-08	97,906	0	01-83	MCHB		12820
HORVITZ, HOWARD R	5	R01 GM24663-05	65,689	3	12-82	GEN		21400
HORVITZ, HOWARD R	5	R01 GM24943-05	57,001	3	03-83	CBY		22200
HORWITZ, ALAN F	2	R01 GM23244-07	175,787	4	06-83	CP		22300
HOSODA, JUNKO	5	R01 GM23563-05	93,875	1	03-83	BBCA		21200
HOSTETLER, KARL Y	5	R01 GM24979-05	84,473	3	03-83	PC		11790
HOUGH, PAUL V	1	R01 GM30607-01	93,112	2	04-83	CTY		21310
HOUK, KENDALL N	1	R01 GM30293-01	121,350	2	01-83	MCHA		11940
HOUSE, HERBERT O	1	R01 GM30735-01	94,967	2	05-83	MCHA		11940
HOUSMAN, DAVID E	5	R01 GM27882-03	81,909	0	03-83	MGN		21480
HOWARD-FLANDERS, PAUL	5	R01 GM11014-22	105,604	3	11-82	RAD		21250
HOWARD, THOMAS H	5	R01 GM29477-02	57,484	1	08-83	CBY		22250
HOWELL, NEIL	5	R01 GM28710-02	87,533	1	12-82	MGN		21280
HOYE, THOMAS R	1	R01 GM29077-01A1 AI	64,046	2	01-83	MCHA		11910
HSIEH, TAO-SHIH	5	R01 GM29006-02	87,630	1	03-83	GEN		21200
HSU, I-NAN	5	R01 GM26680-03	45,814	0	06-83	BBCB		22550
HUANG, BESSIE P	1	R01 GM30348-01	136,257	2	02-83	GEN		22250
HUANG, CHING-HSIEN	5	R01 GM22430-06	109,707	0	06-83	PBC		22400
HUANG, CHING-HSIEN	2	R01 GM17452-11	99,644	4	04-83	BBCB		22300

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
HUANG, JEN-TZAW	5	R01 GM26136-05	54,941	0	08-83	SAT		13200
HUANG, WAI M	5	R01 GM21960-08	96,620	1	03-83	MG		21200
HUBBARD, ANN L	5	R01 GM29133-02	92,382	3	03-83	CBY		22300
HUBBARD, ANN L	5	R01 GM29185-03	143,745	2	08-83	CP		22300
HUBERMAN, JOEL A	5	R01 GM28098-03	128,681	0	06-83	MBY		21200
HUDSON, BRUCE S	1	R13 GM30508-01	2,000	0	05-83	BBCB		22500
HUDSON, BRUCE S	2	R01 GM26536-03A1	55,436	2	05-83	BBCB		22300
HUDSON, BRUCE S	5	R01 GM26981-04	55,046	0	12-82	BBCB		22500
HUEBNER, JAY S	5	R01 GM23250-06	37,465	0	06-83	BBCB		22300
HUF, ERNST G	5	R01 GM03545-27	16,792	0	06-83	PHY		22300
HUH, MARTIN M	5	R01 GM24844-05	88,002	0	03-83	PHRA		11860
HUI, SEK-WEN	1	R01 GM30969-01	46,520	2	06-83	BBCB		22300
HUI, SEK-WEN	5	R01 GM28120-03	75,621	0	06-83	BBCB		22300
HULETT, F MARION	5	R01 GM21909-06	71,824	0	03-83	BIO		22300
HUNT, C ANTHONY	5	R01 GM24612-05	67,297	3	02-83	PHRA		11750
HUNT, THOMAS K	*5	P50 GM27345-03	386,125	0	12-82	SRC		13300
HUNTER, F EDMUND, JR	5	R01 GM24561-05	61,225	0	12-82	BIO		22400
HURWITZ, JERARD	5	R01 GM13344-17	258,086	3	11-82	PC		21200
HURWITZ, JERARD	3	R01 GM13344-17S1	40,381	1	11-82	SSS		21200
HUTCHINSON, C RICHARD	5	R01 GM25799-03	27,269	0	12-82	MCHA		11910
HUTCHINSON, FRANKLIN	5	R01 GM28297-03	102,558	0	07-83	MG		21250
HUTCHISON, CLYDE A, JR	5	R01 GM21668-08	123,556	1	11-82	BBCB		22500
HYDE, JAMES S	5	R01 GM22923-07	99,698	1	02-83	BBCB		22500
HYDE, JAMES S	2	R01 GM27665-04	269,735	2	06-83	BBCB		12840

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
IHLER, GARRET M	5	R01 GM27727-03	42,823	0	03-83	MBC		21200
INGRAHAM, LLOYD L	5	R01 GM27239-03	44,653	0	03-83	BIO		22400
INMAN, ROSS B	1	R01 GM31249-01	82,284	2	06-83	GEN		21200
INMAN, ROSS B	2	R01 GM14711-16	155,733	4	12-82	MG		21200
INOUE, SHINYA	7	R01 GM31617-01	227,226	3	03-83	CBY		22250
INOUYE, MASAYORI	5	R01 GM26843-03	94,084	0	03-83	MBC		22200
INOUYE, MASAYORI	5	R01 GM19043-11	151,485	2	12-82	MBC		22300
IRELAND, ROBERT E	1	R01 GM30335-01	70,680	2	01-83	MCHA		11940
IRVING, CHARLES S	1	R01 AI GM28783-01	54,618	1	05-83	SSS		12820
ISENBERG, IRVIN	5	R01 GM25794-03	46,948	0	07-83	PC		21600
ISENBERG, IRVIN	1	R01 GM29336-01	57,538	2	01-83	BBCA		12840
ISIED, STEPHAN S	5	R01 GM26324-03	59,020	0	09-82	BMT		11840
ITAKURA, KEIICHI	5	R01 GM30395-02	105,565	1	05-83	MBC		21100
ITAKURA, KEIICHI	1	R01 GM31259-01	121,577	2	07-83	PC		21600
ITAKURA, KEIICHI	5	R01 GM28651-02	41,532	0	03-83	PC		21100
ITO, JUNETSU	5	R01 GM28013-03	107,800	3	06-83	MG		21200
ITO, JUNETSU	5	R01 GM28362-03	87,101	0	03-83	MBC		21750
IVARIE, ROBERT D	5	R01 GM27973-02	109,248	3	05-83	MG		21750
IVES, DAVID H	5	R01 GM26900-03	45,115	0	06-83	BIO		22400
JACKSON, JULIUS H	2	R01 GM25605-04	78,514	2	11-82	MG		21750
JACKSON, MICHAEL J	2	R01 GM22369-07	105,417	4	06-83	PHRA		11750

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
JACKSON, ROBERT C	2	R01 GM26763-04	92,596	2	08-83	CBY		22300
JACOBI, PETER A	5	R01 GM29540-02	67,317	1	06-83	MCHA		11910
JACOBS-LORENA, MARCELO	5	R01 GM25327-05	116,214	1	03-83	MBY		21700
JACOBSON, ALLAN S	5	R01 GM27757-03	125,267	2	03-83	MBY		21320
JACOBSON, BRUCE S	2	R01 GM25461-05	92,930	2	07-83	CP		22250
JACOBSON, BRUCE S	5	R01 GM29127-02	51,768	1	03-83	CP		22300
JACOBSON, GARY R	5	R01 GM28226-03	61,080	0	06-83	MBC		22400
JACOBSON, KENNETH A	5	R01 GM29234-04	114,526	0	08-83	BBCA		22300
JACOBSON, LEWIS A	1	R01 GM30588-01	50,460	1	03-83	MBC		21320
JACQUEZ, JOHN A	5	R01 GM24507-04	53,494	0	12-82	PHY		22300
JAEHNING, JUDITH A	5	R01 GM29118-02	71,953	1	03-83	GEN		21310
JAGENDORF, ANDRE T	2	R01 GM14479-17	113,124	2	08-83	PB		22450
JAMES, THOMAS L	5	R01 GM25018-05	68,883	1	03-83	BBCB		22500
JANATA, JIRI	5	R01 GM22952-06	98,455	1	03-83	SB		12400
JANATA, JIRI	5	R01 GM26508-03	58,290	0	03-83	SGYB		12400
JARDETZKY, OLEG	1	R13 GM01611-01	3,000	0	07-83	SRC		22500
JARRETT, HARRY W	7	R01 GM31733-01 JF	37,006	2	02-83	CTY		22400
JARZEMBSKI, WILLIAM B	5	R01 GM24104-03	35,114	0	12-82	SGYB		12400
JASKUNAS, S RICHARD	5	R01 GM24347-05	110,200	1	11-82	MG		21780
JAZWINSKI, S MICHAL	5	R01 GM28099-03	104,540	0	07-83	MBY		21200
JEFFERY, WILLIAM R	2	R01 GM25119-06	106,249	4	07-83	MBY		21320
JEFFREY, GEORGE A	5	R01 GM24526-05	104,482	0	12-82	BBCA		22550
JEFFREY, GEORGE A	5	R01 GM28848-02	43,898	1	03-83	BBCB		22550
JELINEK, WARREN R	2	R01 GM30363-02	163,497	2	07-83	MGN		21600
JENCKS, WILLIAM P	5	R01 GM20888-25	128,662	1	11-82	BIO		22400

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
JENDRISAK, JEROME J	5	R01 GM24294-05	60,278	0	12-82	BIO		21750
JENNINGS, MICHAEL L	2	R01 GM26861-04	99,083	4	06-83	PB		22300
JENSEN, FREDERICK R	5	R01 GM15373-13	75,190	0	02-83	BMT		11920
JENSEN, LYLE H	2	R01 GM10828-27	97,047	2	03-83	BBCA		22550
JENSEN, LYLE H	5	R01 GM13366-18	105,862	0	07-83	BBCB		22550
JI, TAE H	5	R01 GM23586-06	63,677	1	12-82	MBY		22300
JOHNSON, ARTHUR E	2	R01 GM26494-04	99,427	2	03-83	BBCA		21320
JOHNSON, ERIC F	1	R01 GM31001-01	131,973	2	07-83	PB		11760
JOHNSON, GARY L	7	R01 GM30324-01	73,995	0	11-82	MBY		22300
JOHNSON, GARY L	3	R01 GM30324-01S1	36,638	0	11-82	BIO	1	22300
JOHNSON, GEORGE B	2	R01 GM23504-06	111,115	2	08-83	GEN		21800
JOHNSON, JAMES R	5	R01 GM28214-03	54,213	0	06-83	MG		21750
JOHNSON, KENNETH A	2	R01 GM26726-04	118,950	2	06-83	CBY		22250
JOHNSON, LEE F	5	R01 GM29356-02	49,016	1	08-83	MBY		21750
JOHNSON, MICHAEL L	5	R01 GM28928-02	35,302	1	12-82	EH		22500
JOHNSON, PAUL H	7	R01 GM30553-01	149,187	0	12-82	BBCA		21200
JOHNSON, RICHARD W	1	R01 GM30079-01	25,772	2	01-83	BNP		11920
JOHNSON, WALTER C, JR	5	R01 GM21479-08	79,710	3	11-82	BBCA		21100
JOLLOW, DAVID J	1	R01 GM30546-01 AM	83,289	2	04-83	PHRA		11880
JOLLOW, DAVID J	5	R01 GM25781-03	117,031	0	11-82	PHRA		11890
JONES, ALUN G	5	R01 GM23270-06	186,436	0	01-83	BMT		11920
JONES, DEAN P	5	R01 GM28176-03	82,622	0	06-83	PB		22400
JONES, ELIZABETH W	5	R01 GM29713-02	115,249	1	06-83	GEN		21320
JONES, NICHOLAS C	1	R01 GM30636-01 AI	76,600	2	04-83	EVR		21750
JONES, PETER A	1	R01 GM30892-01	96,441	2	06-83	MBY		21200

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
JORDAN, FRANK	5	R01 GM26682-03	61,489	0	03-83	BIO		22400
JORDAN, PETER C	5	R01 GM28643-02	50,499	1	12-82	PHY		22300
JORNS, MARILYN S	1	R01 GM31704-01	75,105	2	07-83	PB		22400
JOSHI, SAROJ	5	R01 GM26420-02	81,112	1	03-83	PB		22450
JULIANO, RUDOLPH L	5	R01 GM26165-03	61,952	0	08-83	CP		22200
JURNAK, FRANCES A	5	R01 GM26895-04	36,187	0	07-83	BBCB		22550
JUSKO, WILLIAM J	5	R01 GM24211-06	99,064	1	06-83	PHRA		11880
KABACK, DAVID B	5	R01 GM27712-03	113,515	0	03-83	GEN		21700
KADISH, KARL M	5	R01 GM25172-05	70,885	1	07-83	BMT		11920
KADNER, ROBERT J	2	R01 GM19078-10A1	81,639	2	08-83	SSS		22300
KAELBER, WILLIAM W	5	R01 GM23336-06	73,495	0	05-83	NLS		13700
KAFATOS, FOTIS C	5	R01 GM24225-06	84,132	2	06-83	MBY		21700
KAFATOS, FOTIS C	5	P01 GM29301-02	577,139	3	07-83	SSS		21750
KAGAN, JACQUES	5	R01 GM24144-05	82,516	0	08-83	TOX		11920
KAHAN, LAWRENCE	5	R01 GM22150-08	65,591	0	04-83	PC		21320
KAHAN, LAWRENCE	5	P41 GM27408-03	21,450	0	08-83	SSS		12900
KAISER, A DALE	5	R01 GM23441-06	111,208	2	12-82	MBC		22200
KAISER, EMIL T	2	R01 GM19037-09	113,070	3	12-82	BIO		22400
KAJI, AKIRA	5	R01 GM12053-18	71,598	0	12-82	PC		21320
KALLEN, ROLAND G	5	R01 GM13777-15	133,398	2	11-82	BIO		22400
KALLEN, ROLAND G	5	R01 GM28628-02	86,950	1	12-82	BIO		21750
KALLMAN, KLAUS D	5	R01 GM19934-20	80,615	0	06-83	GEN		21700
KAMEN, MARTIN D	5	R01 GM18528-21	115,124	0	11-82	BBCA		22500

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
KAMIN, HENRY	5	R01 GM21226-21	134,461	1	05-83	BIO		22400
KAMINSKY, LAURENCE S	5	R01 GM23029-06	45,031	0	03-83	PHRA		13200
KAMPINE, JOHN P	5	R01 GM29641-02	54,619	1	06-83	SAT		13200
KANDEL, ERIC R	7	P01 GM32099-01	578,020	3	04-83	SSS		13700
KANDUTSCH, ANDREW A	5	R01 GM29241-03	76,183	0	08-83	CTY		22410
KANE, ROBERT E	5	R01 GM14363-17	53,825	3	08-83	CBY		22250
KANESHIRO, EDNA S	5	R01 GM20910-06	72,407	0	11-82	CBY		22300
KANESHIRO, EDNA S	3	R01 GM20910-06S1	28,600	0	11-82	CBY		22300
KANTROWITZ, EVAN R	2	R01 GM26237-04	125,244	3	03-83	BIO		22400
KAO, FA-TEN	5	R01 GM26631-03	113,614	0	06-83	MGN		21480
KAPLAN, JOHN E	2	R01 GM25946-04	79,474	2	11-82	HEM		13410
KAPLAN, JOHN E	5	P41 GM27405-03	22,200	0	01-83	SSS		12900
KAPLAN, SAMUEL	5	R01 GM15590-16	110,989	2	12-82	MBC		22300
KARAM, JIM D	5	R01 GM18842-10	67,587	1	03-83	EVR		21200
KAREL, MARCUS	5	R01 GM26472-03	67,296	0	11-82	BBCB		11920
KARGER, BARRY L	2	R01 GM15847-13	123,919	2	11-82	SSS		12820
KARIMAN, KHALIL	1	R01 GM29531-01A1 HL	119,618	2	04-83	SAT		13420
KARLE, ISABELLA L	1	R01 GM30902-01	53,550	2	07-83	BBCA		22550
KARLIN, KENNETH D	5	R01 GM28962-02	57,368	1	03-83	BMT		11920
KARLIN, SAMUEL	5	R01 GM10452-19	172,948	1	12-82	SSS		21400
KARMEN, ARTHUR	5	R01 GM19478-07	102,633	0	11-82	BMT		12820
KARNAKY, KARL J, JR	5	R01 GM29099-02	58,817	1	12-82	PHY		22300
KARRER, KATHLEEN M	5	R01 GM27864 03	71,397	0	03-83	GEN		21700
KARTHA, GOPINATH	2	R01 GM22490-07	68,132	2	08-83	BBCA		22550
KATONA, PETER G	5	R01 GM25538-03	64,223	0	07-83	SGYB		12200

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
KATZ, EUGENE R	5	R01 GM18476-09	85,907	0	04-83	GEN		21700
KAUFFMAN, STUART A	2	R01 GM22341-07	135,058	2	05-83	GEN		21700
KAUFMAN, STEPHEN J	5	R01 GM28842-03	83,858	0	07-83	CTY		22200
KAUFMAN, THOMAS C	5	R01 GM24299-06	98,981	0	07-83	GEN		21700
KAUFMAN, THOMAS C	5	R01 GM29709-02	71,004	1	08-83	GEN		21700
KAZARINOFF, MICHAEL N	5	R01 GM28540-02	46,825	1	11-82	BIO		22400
KEANA, JOHN F	5	R01 GM24951-08	95,865	1	05-83	BBCB		22300
KEANA, JOHN F	5	R01 GM27137-03	75,046	1	01-83	MCHA		11940
KEARNS, DAVID R	5	R01 GM22969-07	90,395	0	11-82	BBCA		21100
KECK, GARY E	5	R01 GM28961-02	61,760	1	05-83	MCHA		11910
KEDES, LAURENCE H	5	R01 GM24118-05	62,373	0	06-83	CBY		21750
KEDES, LAURENCE H	5	R01 GM17995-10	107,615	1	04-83	CBY		21600
KEEN, JAMES H	5	R01 GM28526-02	80,561	1	11-82	CP		22300
KEENAN, THOMAS W	5	R01 GM31244-02	109,671	1	08-83	CBY		22300
KEGELES, GERSON	1	R01 GM29378-01	55,240	0	12-82	BBCB		22500
KEIDERLING, TIMOTHY A	1	R01 GM30147-01	61,544	2	01-83	BBCA		22500
KEITH, JERRY M	5	R01 GM29124-02	75,077	1	03-83	BIO		21320
KEIZER, JOEL E	1	R01 GM30688-01	45,486	2	06-83	BBCA		22400
KELLEMS, RODNEY E	1	R01 GM30204-01	114,429	2	02-83	MBY		21320
KELLER, ELIZABETH B	5	R01 GM10791-20	126,218	3	06-83	PC		21320
KELLER, RONALD K	2	R01 GM25364-04	71,894	4	11-82	PBC		22410
KELLY, DOUGLAS E	5	R01 GM27592-03	74,819	0	08-83	MBY		22300
KELLY, T ROSS	1	R01 GM30696-01	102,036	2	04-83	MCHA		11940
KELLY, T ROSS	5	R01 GM28968-02	115,525	1	03-83	MCHA		11910
KEMP, DANIEL S	2	R01 GM13453-17	188,504	4	06-83	BNP		11440

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
KEMPER, BYRON W	5	R01 GM27718-03	55,876	0	04-83	MBY		11760
KENDE, HANS J	1	R01 GM31373-01	41,231	1	06-83	CP		22200
KENDIG, JOAN J	5	R01 GM22113-06	67,013	0	03-83	SAT		13200
KENNEDY, EUGENE P	5	R01 GM22057-08	161,803	2	04-83	MBC		22300
KENNEDY, EUGENE P	5	R01 GM19822-23	117,861	0	11-82	MBC		22400
KESSIN, RICHARD H	5	R01 GM21809-08	93,198	0	01-83	GEN		21700
KEY, JOE L	5	R01 GM30317-03	126,138	3	07-83	PC		21750
KHAN, SALEEM A	1	R01 GM31685-01	105,812	2	06-83	MG		21200
KHORANA, HAR G	5	R01 GM28289-02	582,970	3	11-82	BIO		22300
KIDWELL, MARGARET G	2	R01 GM25399-04	97,435	2	11-82	GEN		21700
KIGER, JOHN A, JR	5	R01 GM21137-08	97,730	3	03-83	GEN		21700
KIM, JUNG-JA P	1	R01 GM29076-01A1	75,294	2	02-83	BBCB		22550
KIM, SUNG-HOU	9	R01 GM31616-04	64,779	4	06-83	BBCA		21100
KIM, SUNG-HOU	5	R01 GM29287-02	83,265	3	07-83	BBCB		22550
KING, ALBERT I	5	R01 GM20201-09	90,774	0	06-83	AFY		12320
KING, JONATHAN A	5	R01 GM17980-13	141,339	0	08-83	VR		21320
KING, TSOO E	5	R01 GM16767-14	108,011	2	11-82	BIO		22450
KINSEY, JOHN A	2	R01 GM23967-04A1	79,561	2	08-83	GEN		21750
KIRK, DAVID L	5	R01 GM24172-06	89,968	0	07-83	CBY		22200
KIRK, DAVID L	5	R01 GM27215-03	96,627	0	12-82	CBY		21320
KIRKWOOD, SAMUEL	5	R01 GM09293-20	61,764	2	03-83	BIO		22400
KIRSCHNER, MARC W	5	R01 GM26875-04	203,087	3	11-82	MBY		22250
KIRTLEY, MARY E	5	R01 GM19394-09	85,957	0	11-82	BIO		22300
KISSINGER, PETER T	5	R01 GM26283-03	73,167	0	09-82	TOX		11890
KITZ, RICHARD J	*5	P50 GM15904-15	388,016	1	12-82	PTR		13100

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
KLAPPER, MICHAEL H	1	R01 GM29353-01A1	95,109	2	06-83	PB		22400
KLAR, AMAR J	5	R01 GM25678-05	155,587	3	06-83	GEN		21700
KLASS, MICHAEL R	5	R01 GM26808-03	65,673	0	08-83	GEN		21750
KLEBE, ROBERT J	7	R01 GM31056-01	9,329	0	11-82	MGN		21480
KLECKNER, NANCY E	5	R01 GM25326-05	143,402	3	06-83	MG		21780
KLEIN, CLAUDETTE	5	R01 GM25080-05	110,363	1	08-83	CP		22200
KLEIN, CLAUDETTE	5	R01 GM26349-03	62,710	0	12-82	MBY		22300
KLEIN, HANNAH L	1	R01 GM30439-01	106,665	2	04-83	GEN		21600
KLEVECZ, ROBERT R	2	R01 GM31262-02	139,420	3	11-82	SSS		22200
KLINE, BRUCE C	2	R01 GM25604-04	88,304	2	11-82	MG		21200
KLINMAN, JUDITH P	2	R01 GM25765-05 NS	128,629	2	05-83	BIO		22400
KLUGER, MATTHEW J	5	R01 GM28242-03	83,702	0	06-83	SSS		13700
KNIGHT, PAUL R, III	5	R01 GM28911-02	80,313	1	03-83	SAT		13200
KNOWLES, JEREMY R	5	R01 GM21659-08	135,979	1	11-82	BIO		22400
KNOWLES, JEREMY R	5	R01 GM22961-06	81,890	3	11-82	MBC		22300
KOCHEVAR, IRENE E	5	R01 GM30755-02	103,590	0	07-83	GMA		13420
KOECHEL, DANIEL A	5	R01 GM26775-03	63,345	0	06-83	TOX		11790
KOEHN, RICHARD K	5	R01 GM21133-07	87,916	2	03-83	GEN		21800
KOEPPE, ROGER E, II	5	R01 GM28605-02	39,309	1	11-82	PC		21320
KOGOMA, TOKIO	2	R01 GM22092-07	83,625	2	02-83	MG		21200
KOHLER, HEINZ	7	R01 GM31367-01	94,470	0	03-83	PC		22300
KOHLER, SUSAN J	5	R01 GM27140-02	35,335	0	11-82	BBCB		22300
KOHLHAW, GUNTER B	5	R01 GM15102-15	78,923	1	11-82	BIO		22400
KOLATTUKUDY, P E	2	R01 GM18278-12	226,230	4	12-82	PC		11910
KOLHOUSE, JOHN F	2	R01 GM26486-04	86,745	4	06-83	BMT	.	11930

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
KOLLMAN, PETER A	1	R01 GM29072-01A1	65,283	2	01-83	BBCA		22500
KOLODNER, RICHARD D	2	R01 GM26017-04 AI	161,841	4	11-82	MG		21200
KONIGSBERG, WILLIAM H	5	R01 GM12607-18	149,269	2	12-82	PC		21320
KOPPEL, DENNIS E	2	R01 GM23585-06	85,167	2	12-82	CTY		22300
KOPPEL, DENNIS E	5	R01 GM28250-03	56,665	0	06-83	BBCA		22300
KOPPLE, KENNETH D	5	R01 GM26071-04	156,625	1	04-83	BBCB		22500
KORNBERG, ARTHUR	5	R01 GM07581-22	374,585	0	08-83	BIO		21200
KORNBERG, ROGER D	5	R01 GM28820-02	127,942	1	02-83	MBY		21320
KORNBERG, THOMAS B	1	R01 GM30637-01	112,386	2	02-83	MBY		21750
KOSSIAKOFF, ANTHONY A	5	R01 GM29616-02	109,344	1	06-83	BBCB		22550
KOWALSKI, DAVID	2	R01 GM24950-07	57,732	0	05-83	BIO		21200
KOZARICH, JOHN W	5	R01 GM26985-03	78,323	0	07-83	BIO		21320
KOZARICH, JOHN W	5	R01 GM29204-02	70,850	1	03-83	PB		22400
KRAKOW, JOSEPH S	5	R01 GM22619-07	83,615	2	03-83	MBC		21750
KRAKOW, JOSEPH S	5	R01 GM18673-11	121,760	1	11-82	PC		21310
KRAUS, GEORGE A	5	R01 GM24474-05	57,282	0	02-83	MCHA		11940
KRAUS, GEORGE A	5	P41 GM27433-03	26,505	0	08-83	SSS		12900
KRAUT, JOSEPH	2	R01 GM10928-20	142,270	4	12-82	BBCB		22550
KREIBICH, GERT	2	R01 GM21971-08	164,447	4	01-83	MBY		22300
KREILICK, ROBERT W	5	R01 GM22793-07	130,526	2	03-83	BMT		22500
KREMKAU, FREDERICK W	5	R01 GM30521-02	78,781	1	12-82	RNM		12910
KRIDER, HALLIE M	5	R01 GM23605-05	75,607	3	12-82	GEN		21750
KRIEGER, MONTY	1	R01 GM30243-01A1	91,247	2	06-83	CTY		22300
KRISHNA, N RAMA	5	R01 GM25219-03	61,673	0	12-82	BBCB		22500
KRONAUER, RICHARD E	1	R01 GM30719-01 MH	44,352	2	04-83	SSS		12200

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
KRUEGER, ROBERT C	5	R01 GM23030-07	47,312	1	06-83	PBC		21600
KRULWICH, TERRY A	5	R01 GM28454-02	97,087	1	08-83	MBC		22450
KRUMDIECK, CARLOS L	5	R01 GM23453-05	75,517	0	08-83	BIO		22400
KUBAI, DONNA F	1	R01 GM31198-01	55,970	4	07-83	CBY		22250
KUEHL, LEROY R	5	R01 HD GM13864-17	90,181	1	05-83	PC		21600
KUEHN, GLENN D	5	R01 GM18538-12	71,733	2	08-83	MBY		22200
KUN, ERNEST	5	R01 GM20552-06	63,766	0	11-82	BIO		22300
KUNG, CHING	5	R01 GM22714-08	204,324	2	04-83	GEN		22300
KUNG, SHAIN-DOW	5	R01 GM27746-03	56,430	0	03-83	BIO		22400
KUNTZ, IRWIN D, JR	5	R01 GM19267-11	53,575	3	01-83	BBCB		22500
KUO, MACUS T	5	R01 GM28573-02	107,332	1	01-83	MGN		21600
KUPFER, DAVID	5	R01 GM22688-06	97,446	0	03-83	PHRA		11760
KUPKE, DONALD W	5	R01 GM29078-02	58,670	0	03-83	BBCA		22500
KUROSKY, ALEXANDER	5	R01 GM29039-02	90,330	3	03-83	PBC		22500
KUSHNER, SIDNEY R	5	R01 GM27997-03	83,885	1	12-82	MG		21200
KUSTIN, KENNETH	5	R01 GM08893-19	64,735	1	03-83	BMT		22500
KUSTU, SYDNEY G	5	R01 GM21397-09	90,102	0	05-83	MBC		21750
KUTCHAI, HOWARD C	5	R01 GM24168-06	66,294	0	07-83	PHY		22300
LA FOUNTAIN, JAMES R, JR	5	R01 GM27288-03	58,028	0	12-82	CBY		22250
LACKS, SANFORD A	5	R01 GM29721-02	98,056	3	06-83	MG		21750
LAFFLER, THOMAS G	1	R01 GM29460-01A1	113,566	2	08-83	GEN		22200
LAI, EUGENE C	5	R01 GM29697-02	108,847	1	06-83	MGN		21750
LAINE, ROGER A	5	R01 GM23902-06	115,813	0	06-83	PBC		22410

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
LAIRD, CHARLES D	5	R01 GM19179-11	100,179	2	02-83	GEN		21600
LAIRD, NAN M	5	R01 GM29745-02	83,107	1	08-83	SSS		12100
LAKE, JAMES A	2	R01 GM24034-06	112,923	4	11-82	MBY		21320
LAKOWICZ, JOSEPH R	5	R01 GM29318-02	36,632	1	01-83	BBCA		22300
LAMBETH, DAVID O	5	R01 GM25252-04	24,610	0	12-82	MCHA		11930
LAMBOWITZ, ALAN M	5	R01 GM23961-06	83,362	2	06-83	MBY		21280
LANDE, RUSSELL S	5	R01 GM27120-03	35,186	0	08-83	GEN		21800
LANDS, WILLIAM E	1	R01 GM30509-01	83,906	2	04-83	PB		22400
LANDY, ARTHUR	5	R01 GM27861-14	126,690	2	05-83	MBC		21750
LANGDON, ROBERT G	5	R01 GM27171-03	90,592	0	07-83	PB		22300
LANGER, ROBERT S	2	R01 GM25810-04	132,289	2	12-82	SB		12400
LANGER, ROBERT S	2	R01 GM26698-04	167,481	2	06-83	PHRA		12300
LANGERMAN, NEAL R	5	R01 GM27953-03	40,671	0	06-83	BBCA		22400
LANGMORE, JOHN P	5	R01 GM27937-03	90,823	0	03-83	CTY		21600
LANKS, KARL W	5	R01 GM26167-03	84,010	0	12-82	CTY		21320
LANSMAN, ROBERT A	5	R01 GM28147-03	78,532	0	11-82	MGN		21280
LANYI, JANOS	1	R01 GM30174-01	102,371	2	07-83	BBCA		22500
LANYI, JANOS K	5	R01 GM29498-02	71,688	1	06-83	MBC		22300
LAROCK, RICHARD C	5	R01 GM24254-06	74,539	0	08-83	BMT		11910
LASKOWSKI, MICHAEL, JR	5	R01 GM10831-24	259,889	3	08-83	PC		22500
LATEN, HOWARD M	1	R01 GM31023-01	72,492	2	08-83	MBC		21700
LATIES, GEORGE G	5	R01 GM19807-10	79,318	0	11-82	BIO		22300
LATORRE, RAMON	5	R01 GM28992-02	71,651	1	03-83	PHY		22300
LATT, SAMUEL A	5	R01 GM21121-09	200,773	1	01-83	GEN		21600
LAUFER, DANIEL A	5	R01 GM26004-04	58,006	1	05-83	BBCA		22450

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
LAUFFER, MAX A	5	R01 GM21619-08	103,303	1	02-83	BBCB		21100
LAURIE-AHLBERG, CATHY C	5	R01 GM28455-02	69,253	1	01-83	GEN		21300
LAUTERBUR, PAUL C	5	R01 GM28532-02	49,075	1	01-83	BBCB		22300
LAVALLEE, DAVID K	5	R01 GM27179-02	49,810	1	05-83	BMT		11920
LAW, JOHN H	5	R01 GM29238-02	150,918	1	01-83	PC		22400
LAWRENCE, CHRISTOPHER W	5	R01 GM21858-08	152,436	3	01-83	RAD		21250
LAWTHER, ROBERT P	5	R01 GM28021-03	80,817	0	06-83	MG		21600
LAWTON, RICHARD G	5	R01 GM23679-03	74,334	0	09-82	BIO		22400
LE BRETON, PIERRE R	5	R01 GM28878-03	61,179	0	08-83	BBCA		21100
LE CLERC, JOSEPH E	2	R01 GM27817-03	82,446	2	03-83	MG		21250
LEBHERZ, HERBERT G	5	R01 GM23045-07	82,782	1	06-83	BIO		21320
LEE, CHUAN-PU	5	R01 GM22751-05	98,291	0	03-83	BIO		22450
LEE, JOHN W	2	R01 GM28139-03	69,594	2	11-82	BBCA		22500
LEE, NANCY L	5	R01 GM14652-16	89,056	1	12-82	MG		21750
LEETE, EDWARD	5	R01 GM13246-25	93,299	1	12-82	MCHA		11910
LEETE, EDWARD	3	R01 GM13246-25S1	27,000	0	12-82	BNP		11910
LEFEVRE, GEORGE, JR	5	R01 GM13631-17	108,695	0	11-82	GEN		21250
LEFFAK, IRA M	5	R01 GM26803-03	66,221	0	12-82	CTY		21600
LEGG, JOHN I	5	R01 GM23081-06	75,344	0	03-83	BMT		11870
LEHMAN, I ROBERT	5	R01 GM06196-24	256,607	1	08-83	PC		21200
LEHNINGER, ALBERT L	5	R01 GM05919-24	262,993	1	02-83	BIO		22450
LEIBOVICH, S JOSEPH	5	R01 GM29135-02	55,211	1	12-82	SAT		13420
LEIGH, JOHN S, JR	5	R01 GM25052-05	187,702	3	03-83	BMT		22450
LEINWAND, LESLIE A	5	R01 GM29090-02	136,313	1	08-83	SSS		21600
LEMASTERS, JOHN J	5	R01 GM28999-02	52,886	1	03-83	PB		22450

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
LENHOFF, HOWARD M	1	R01 GM30647-01	75,878	2	04-83	CBY		22200
LENNARZ, WILLIAM J	5	R01 GM21451-08	144,266	2	05-83	PC		22410
LENNARZ, WILLIAM J	2	R01 GM24821-04	105,428	2	03-83	PBC		22410
LEONARD, EDWARD F	1	R01 GM30205-01	124,256	2	01-83	SB		12820
LEONARD, NELSON J	5	R01 GM05829-24	158,763	2	11-82	MCHA		11910
LERMAN, LEONARD S	2	R01 GM24030-07	147,401	2	08-83	BBCA		21600
LERNER, RICHARD A	5	R01 GM22500-07	142,474	1	04-83	CBY		22200
LESSIE, THOMAS G	5	R01 GM21198-14	74,092	2	03-83	MBC		21750
LESTER, H ALLEN	5	R01 GM29836-02	64,447	1	03-83	NEUB		22300
LETSINGER, ROBERT L	2	R01 GM10265-20	110,693	3	06-83	BNP		11930
LETSINGER, ROBERT L	3	R01 GM10265-20S1	65,937	2	06-83	SSS		11930
LEVENSON, STANLEY M	5	R01 GM19328-11	205,812	2	06-83	SAT		13420
LEVI, ROBERTO	5	R01 GM20091-08	141,478	2	05-83	PHRA		11770
LEVIN, BRUCE R	5	R01 GM19848-09	91,363	1	11-82	MBC		21800
LEVIN, DANIEL H	5	R01 GM24825-05	128,219	3	12-82	PC		21320
LEVINE, LAWRENCE	5	R01 GM27256-03	108,045	2	11-82	PC		22400
LEVITT, DAVID G	2	R01 GM25938-04A1	71,743	2	06-83	PHY		22300
LEVITZKI, ALEXANDER	5	R01 GM26604-03	43,415	0	02-83	BIO		11770
LEVITZKI, ALEXANDER	5	R01 GM27087-03	46,728	0	03-83	BIO		22300
LEVY, BEATRIZ W	5	R01 GM27736-03	67,940	0	02-83	CTY		21600
LEVY, GEORGE C	5	R01 GM29778-02	58,280	0	06-83	BBCA		21100
LEVY, GERHARD	*5	P50 GM20852-09	363,342	1	12-82	PTR		11700
LEVY, GERHARD	5	R01 GM19568-15	90,949	0	06-83	PHRA		11850
LEVY, RONALD M	1	R01 GM30580-01	57,455	2	05-83	BBCB		22500
LEWIN, ALFRED S	5	R01 GM29387-02	98,136	1	06-83	MBY		21280

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
LEWIS, FRANK R, JR	5	R01 GM27229-03	81,782	2	01-83	SAT		13410
LEWIS, JAMES A	1	R01 GM31659-01	47,465	2	06-83	GEN		11770
LEWONTIN, RICHARD C	2	R01 GM21179-09	192,867	4	02-83	GEN		21800
LI, CHOH H	2	R01 GM02907-31	157,006	4	02-83	BCE		11910
LI, WEN-HSIUNG	1	R01 GM30998-01	33,898	2	06-83	GEN		21800
LIARAKOS, CHARLES D	5	R01 GM29532-02	75,617	1	08-83	MBY		21320
LICHTER, ROBERT L	5	R01 GM21148-06	83,254	0	11-82	BBCB		11940
LIEBKE, E HOPE	5	R01 GM27896-03	57,770	0	07-83	MBC		21750
LIEBMAN, SUSAN W	5	R01 GM24189-06	56,421	2	07-83	GEN		21320
LIENHARD, GUSTAV E	5	R01 GM22996-07	89,378	1	08-83	PBC		22300
LIETMAN, PAUL S	5	R01 GM26902-03	165,383	0	06-83	SSS		11890
LIGHT, ALBERT	5	R01 GM22261-08	68,263	0	04-83	PC		22500
LILIEN, JACK E	5	R01 GM29131-02	87,549	1	03-83	CP		22200
LIM, EDWARD C	5	R01 GM27767-03	50,394	0	03-83	BBCA		21100
LIM, JOHNG K	1	R01 GM31106-01	116,739	2	08-83	GEN		21600
LIN, EDMUND C	5	R01 GM11983-19	171,587	2	04-83	MBC		22400
LIN, JIM J	1	R01 GM31048-01	101,640	2	08-83	CBY		22200
LIN, SHIN	2	R01 GM22289-08	159,878	4	04-83	CTY		22250
LINCK, RICHARD W	5	R01 GM21527-08	151,161	1	12-82	MBY		22250
LINDELL, THOMAS J	5	R01 GM22897-06	54,228	0	03-83	MBY		21750
LINDQUIST, SUSAN L	2	R01 GM25874-04	126,533	4	11-82	GEN		21320
LINDSLEY, DAN L	2	R01 GM26810-04	159,992	2	05-83	GEN		21700
LINGREL, JERRY B	5	R01 GM10999-18	116,422	3	06-83	BIO		21750
LINN, STUART M	1	R01 GM30415-01	106,380	4	05-83	PC		21200
LINN, STUART M	2	R01 GM19020-14	119,551	4	12-82	MG		21200

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
LINSCHEER, WILLEM G	5	R01 GM27801-02	103,201	1	12-82	PHRA		11780
LIOTTA, DENNIS C	5	R01 GM26908-03	54,420	0	03-83	MCHA		11920
LIPMANN, FRITZ	5	R01 GM13972-17	142,624	0	08-83	PC		22300
LIPPARD, STEPHEN J	5	R01 GM16449-15	120,033	0	08-83	SSS		22500
LIPSCOMB, JOHN D	5	R01 GM24689-05	72,825	1	12-82	PB		22400
LIPSCOMB, WILLIAM N	5	R01 GM06920-24	331,102	2	08-83	BBCA		22550
LIPSHUTZ, BRUCE H	5	R01 GM28128-03	48,400	0	07-83	MCHA		11910
LIPSON, EDWARD D	5	R01 GM29707-02	83,165	2	06-83	BBCA		22300
LIS, JOHN T	5	R01 GM25232-05	103,840	3	03-83	GEN		21750
LIS, LEONARD J	1	R01 GM30115-01	56,931	2	08-83	BBCA		22300
LISKAY, ROBERT M	5	R01 GM29033-02	81,454	1	03-83	MGN		21400
LITMAN, GARY W	5	R01 GM28348-03	68,970	0	06-83	BIO		21600
LITTLE, JOHN W	5	R01 GM24178-06	106,612	2	07-83	MG		21250
LIU, CHUNG-CHIUN	5	R01 GM28947-02	62,161	0	03-83	SB		12400
LIU, LEROY F	5	R01 GM27731-03	66,978	0	03-83	MBC		21200
LIU, MAW-SHUNG	7	R01 GM31664-01	79,775	0	03-83	SAT		13420
LIU, Y KING	2	R01 GM26608-03A1	112,806	2	02-83	AFY		12320
LIVINGSTON, DENNIS M	5	R01 GM28709-02	61,539	1	01-83	GEN		21200
LIZARDI, PAUL M	5	R01 GM28986-02	89,969	1	03-83	MBY		21600
LIZZI, FREDERIC L	5	R01 GM26850-03	285,504	1	01-83	RNM		12910
LO, CECILIA W	1	R01 GM30461-01	113,744	2	04-83	GEN		22200
LOACH, PAUL A	5	R01 GM11741-16	105,849	1	06-83	PB		22450
LOACH, PAUL A	2	R01 GM26098-04	79,583	4	06-83	PB		22450
LOCKARD, RAYMOND E	5	R01 GM27692-02	90,388	1	11-82	CTY		21320
LOCKARD, RAYMOND E	5	R01 GM28985-02	78,599	1	03-83	MBY		21320

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
LOCKER, JOSEPH	5	R01 GM27795-03	82,805	0	04-83	MBY		21280
LODISH, HARVEY F	5	R01 GM27989-03	96,712	0	06-83	CP		22300
LODISH, HARVEY F	5	R01 GM28097-03	65,248	0	06-83	CTY		21600
LOEGERING, DANIEL J	2	R01 GM26102-04A1	89,261	2	06-83	SAT		13410
LOEGERING, DANIEL J	5	R01 GM26297-06	44,924	0	09-82	SGYA		13410
LOEHR, THOMAS M	5	R01 GM18865-11	119,490	1	04-83	BBCB		22500
LOEW, LESLIE M	2	R01 GM25190-04	95,005	3	11-82	BBCA		22300
LOEWUS, FRANK A	5	R01 GM22427-07	117,140	0	02-83	BIO		22400
LOFTFIELD, ROBERT B	1	R01 GM30679-01	100,501	2	03-83	PC		21320
LOHMAN, TIMOTHY M	1	R01 GM30498-01	79,106	2	04-83	BBCA		21200
LOHR, DENNIS E	2	R01 GM27623-03A1	72,354	2	06-83	GEN		21600
LONG, CALVIN L	2	P01 GM23065-07A1	376,955	2	06-83	SRC		13300
LONG, JOHN P	2	P01 GM22365-06A1	363,480	2	04-83	PTR		11900
LONG, SHARON R	1	R01 GM30962-01	115,120	2	06-83	MG		21700
LOSICK, RICHARD M	5	R01 GM18568-10	135,498	2	01-83	MBC		21750
LOUDON, G MARC	5	R01 GM28850-02	100,317	1	08-83	MCHA		11440
LOVE, L J CLINE	5	R01 GM27350-03	13,116	0	08-83	BBCA		22500
LOW, PHILIP S	1	R01 GM29643-01	41,733	2	08-83	BBCB		22300
LOWENSTEIN, JOHN M	1	R01 GM31099-01	146,662	4	06-83	PB		22400
LOWENSTEIN, JOHN M	5	R01 AM GM07261-22	103,636	1	12-82	PC		22400
LU, PONZY	2	R01 GM22623-07	135,185	4	02-83	BBCB		21750
LUCAS, JOE	5	R01 GM25076-05	183,591	0	03-83	SSS		12990
LUCCHESI, JOHN C	5	R01 GM15691-15	144,039	1	08-83	GEN		21700
LUCK, DAVID J	5	R01 GM17132-14	187,439	2	08-83	GEN		22250
LUDUENA, RICHARD F	2	R01 GM23476-04	85,563	2	08-83	CBY		22250

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
LUDWIG, MARTHA L	5	R01 GM16429-15	177,655	3	08-83	BBCB		22550
LUEKING, DONALD R	5	R01 GM28036-03	39,497	0	07-83	MBC		22300
LUSE, DONAL S	5	R01 GM29487-02	100,206	1	06-83	MBY		21310
LUSTY, CAROL J	2	R01 GM25846-03	112,641	2	03-83	MBY		21750
LUTKENHAUS, JOSEPH F	5	R01 GM29764-02	83,012	1	06-83	MG		21750
LUTTER, LEONARD C	5	R01 GM27117-03	60,963	0	12-82	MBY		21750
LYMAN, DONALD J	5	P01 GM24487-05	477,537	1	01-83	SRC		12300
LYNCH, CARL, III	1	R23 GM31144-01	40,783	2	07-83	SAT		13250
LYNCH, CAROL B	5	R01 GM21993-07	69,907	0	03-83	GEN		13700
LYNCH, CAROL B	3	R01 GM21993-07S1	36,063	0	03-83	GEN		13700
MAAS, WERNER K	5	R01 GM06048-24	109,299	1	12-82	MBC		21750
MACCOLL, ROBERT J	2	R01 GM26050-03	44,636	2	03-83	BBCA		22500
MACDONALD, ROBERT C	5	R01 GM28404-06	41,252	0	02-83	BBCB		22300
MACDONALD, RUSSELL E	5	R01 GM27656-03	100,080	0	08-83	BIO		22300
MACEY, ROBERT I	5	R01 GM18819-09	71,264	2	11-82	PHY		22300
MACFARLANE, RONALD D	2	R01 GM26096-05	145,748	2	06-83	BMT		12840
MACKLER, BRUCE	5	R01 GM23006-23	124,081	3	08-83	PB		22450
MAGASANIK, BORIS	2	R01 GM07446-24	145,272	4	08-83	MBC		21750
MAGNUS, PHILIP D	1	R01 GM29801-01A1	92,857	2	03-83	MCHA		11940
MAGUIRE, MARJORIE P	2	R01 GM19582-10	21,245	2	01-83	GEN		21600
MAGUIRE, MICHAEL	5	P41 GM27543-02	16,414	1	11-82	SSS		12900
MAGUIRE, MICHAEL E	5	R01 GM26340-03	99,660	0	03-83	PHRA		11870
MAHLER, HENRY R	5	R01 GM12228-19	155,288	1	03-83	BIO		22450

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
MAIER, RONALD V	1	R23 GM30272-01	43,222	2	12-82	SAT		13450
MAITRA, UMADAS	5	R01 GM15399-14	183,811	1	04-83	MBY		21320
MAKINEN, MARVIN W	2	R01 GM21900-07	143,297	2	03-83	BBCB		22500
MAKOWSKI, LEE	5	R01 GM29829-02	103,398	1	03-83	BBCB		22550
MALBON, CRAIG C.	5	R01 GM29220-02	70,479	1	03-83	PC		22400
MALEY, FRANK	5	R01 GM26387-03	16,500	0	12-82	BIO		22400
MALKIN, RICHARD	5	R01 GM20571-09	65,620	0	06-83	PB		22450
MALLER, JAMES L	2	R01 GM26743-04	73,031	2	06-83	CP		22200
MALONE, ROBERT E	5	R01 GM29172-02	125,273	1	03-83	GEN		21200
MALONEY, PETER C	5	R01 GM24195-06	110,276	0	07-83	PB		22450
MANATT, STANLEY L	5	R01 GM25908-02	88,117	1	02-83	MCHA		11940
MANDEL, LAZARO J	5	R01 GM29256-11	80,686	0	08-83	PHY		13410
MANIATIS, THOMAS P	5	R01 GM29379-02	159,955	3	06-83	GEN		21600
MANLEY, JAMES L	5	R01 GM28983-02	97,198	1	03-83	MBY		21750
MANNERING, GILBERT J	5	R01 GM27780-03	164,675	0	08-83	PHRA		11760
MANNERING, GILBERT J	5	R01 GM28171-02	87,880	1	08-83	PHRA		11780
MANNEY, THOMAS R	5	R01 GM19175-11	83,598	0	11-82	GEN		21700
MANNICK, JOHN A	2	R01 GM26016-04A1	168,234	4	01-83	SSS		13410
MANNING, MAURICE	5	R01 GM25280-11	120,364	0	06-83	MCHA		11470
MARCU, KENNETH B	2	R01 GM26939-04	90,747	2	06-83	MGN		21750
MARGERUM, DALE W	5	R01 GM12152-18	75,973	2	11-82	BMT		11920
MARGOLIASH, EMANUEL	5	R01 GM29001-02	121,569	1	03-83	BIO		21280
MARGOLIASH, EMANUEL	2	R01 GM19121-11	272,310	4	12-82	PB		22450
MARGOLIN, PAUL	5	R01 GM15255-17	168,597	1	05-83	MG		21250
MARGOLIS, ROBERT L	5	R01 GM28189-03	50,904	0	06-83	CBY		22250

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
MARIANO, PATRICK S	5	R01 GM27251-03	65,397	0	12-82	MCHA		11940
MARIANO, PATRICK S	5	R01 GM29016-02	54,164	1	03-83	MCHA		11910
MARINUS, MARTIN G	1	R01 GM30330-01	101,468	2	03-83	MG		21250
MARKHAM, GEORGE D	1	R01 GM31186-01	78,214	2	06-83	BIO	1	22400
MARKLEY, JOHN L	5	R01 GM19907-10	92,092	0	05-83	BBCA		22500
MARKOW, THERESE A	1	R01 GM30638-01	43,400	2	04-83	GEN		21400
MARMUR, JULIUS	5	R01 GM28572-02	246,668	1	02-83	SSS		21750
MARNETT, LAWRENCE J	5	R01 GM23642-06	73,376	0	12-82	BIO		22400
MARONI, GUSTAVO P	5	R01 GM26207-03	43,999	0	03-83	GEN		21700
MARRS, BARRY L	5	R01 GM20173-10	134,742	3	07-83	MG		21750
MARSH, DONALD J	5	R01 GM28398-03	115,899	0	08-83	CVB		12200
MARSH, J LAWRENCE	5	R01 GM28972-02	86,717	1	03-83	GEN		21700
MARSH, RICHARD E	2	R01 GM16966-13	74,488	2	01-83	BBCA		22550
MARSH, ROBERT C	5	R01 GM23608-06	62,321	2	12-82	MBC		21200
MARSHALL, ALAN G	5	R01 GM29274-02	80,471	1	12-82	BBCA		21100
MARSHALL, BRYAN E	5	R01 GM29628-02	148,553	1	06-83	SAT		13200
MARSHALL, GARLAND R	2	P01 GM24483-04	509,826	2	11-82	PTR		11900
MARSHALL, JAMES A	5	R01 GM29475-03	93,091	1	08-83	MCHA		11910
MARSHALL, JAMES J	5	R01 GM29242-02	92,632	0	09-82	PC		22500
MARTIN, CHARLES E	5	R01 GM28040-03	57,999	0	08-83	CTY		22300
MARTIN, NANCY C	2	R01 GM27597-04	118,409	4	05-83	GEN		21280
MARTIN, ROY W	5	R01 GM26187-03	69,085	0	09-82	SGYB		12400
MARTIN, TERENCE E	5	R01 GM27139-03	79,018	0	06-83	MBY		21320
MARTINSON, HAROLD G	5	R01 GM28675-02	51,867	3	11-82	BIO		21600
MARX, KENNETH A	5	R01 GM25886-03	62,021	0	07-83	GEN		21600

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
MARZILLI, LUIGI G	2	R01 GM29222-02	99,213	3	02-83	BBCA		21100
MARZILLI, LUIGI G	5	R01 GM29225-02	63,397	0	03-83	BMT		11920
MARZLUF, GEORGE A	2	R01 GM23367-06	86,724	4	12-82	GEN		21750
MARZLUFF, WILLIAM F, JR	5	R01 GM27789-03	92,497	0	06-83	MBY		21750
MARZLUFF, WILLIAM F, JR	2	R01 GM29832-06A2	114,130	2	06-83	CTY		21750
MASAMUNE, SATORU	5	R01 AG GM28828-06	35,628	0	07-83	BMT		11770
MASKER, WARREN E	5	R01 GM28113-03	57,112	0	08-83	MG		21200
MASSEY, VINCENT	5	R01 GM11106-20	236,333	0	08-83	BIO		22400
MASTERS, BETTIE SUE	1	R01 GM31296-01	70,014	2	05-83	PB		11760
MATHEWS, F SCOTT	5	R01 GM20530-10	120,652	1	07-83	BBCB		22550
MATHEWS, MICHAEL B	1	R13 GM30579-01	5,000	0	03-83	SSS		21320
MATHEWS, MICHAEL B	5	R01 GM GM27790-03	91,068	0	03-83	MBY		21750
MATSUMOTO, LLOYD H	1	R01 GM31964-01	93,638	2	08-83	MBY		21200
MATTA, KHUSHI L	5	R01 GM24392-03	63,092	0	08-83	MCHA		22400
MATTEO, RICHARD S	2	R01 GM26745-04	84,534	2	06-83	SAT		13200
MATTESON, DONALD S	2	R01 NS GM27109-03	42,951	2	08-83	BMT		11930
MATTHEWS, BRIAN W	5	R01 GM20066-10	93,738	1	12-82	BBCB		22550
MATTHEWS, BRIAN W	5	R01 GM21967-08	115,133	3	05-83	BBCB		22550
MATTHEWS, CHARLES R	2	R01 GM23303-07	97,742	2	06-83	BBCA		22500
MATTHEWS, CHARLES R	5	R01 GM24570-05	40,422	1	12-82	BBCA		22500
MATTHEWS, KATHLEEN S	2	R01 GM22441-07	84,960	4	03-83	BBCA		21310
MATTHEWS, ROWENA G	1	R01 GM30885-01	48,621	2	06-83	BIO	1	22400
MATTHEWS, ROWENA G	5	R01 GM24908-05	93,762	3	03-83	BIO		22400
MATTOON, JAMES R	5	R01 GM27860-04	103,926	2	08-83	PB		21280
MAUK, ARTHUR G	5	R01 GM28834-03	29,260	0	08-83	BMT		22400

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
MAUL, GERD G	5	R01 GM21615-07	108,927	0	11-82	CTY		22300
MAUZERALL, DAVID	5	R01 GM25693-05	104,576	1	06-83	BBCA		22300
MAXAM, ALLAN M	5	R01 GM28507-02	144,031	1	11-82	GEN		21600
MAY, SHELDON W	5	R01 GM23474-06	122,418	0	08-83	PB		22400
MAZZE, RICHARD I	2	R01 GM22746-07	64,444	2	06-83	SAT		13200
MC ALLISTER, WILLIAM T	2	R01 GM21783-08A1	78,673	4	06-83	MG		21310
MC CLOSKEY, JAMES A	5	R01 GM21584-08 AI	198,778	1	12-82	SSS		12840
MC CLOSKEY, JAMES A	5	R01 GM29812-08	155,507	2	04-83	SSS		21320
MC CLURE, RICHARD J	5	R01 GM21164-08	75,857	0	12-82	BBCB		22550
MC CLURE, WILLIAM R	5	R01 GM30375-02	88,487	2	06-83	MG		21310
MC CLURE, WILLIAM R	3	R01 GM30375-02S1	55,569	2	06-83	MG		21310
MC CREERY, DOUGLAS B	5	R01 GM32104-02	59,427	0	06-83	SAT		13700
MC ENTEE, KEVIN	5	R01 GM29558-02	102,112	1	06-83	MG		21200
MC FADDEN, BRUCE A	5	R01 GM19972-13	120,461	3	07-83	MBC		22500
MC FALL, ELIZABETH	5	R01 GM11899-19	114,031	2	12-82	GEN		21750
MC GILL, THOMAS E	5	R01 GM07495-20	78,763	0	02-83	EXP		13700
MC GRATH, JOHN J	1	R01 GM31202-01	91,706	2	07-83	CBY		12930
MC GUIRE, PETER M	5	R01 GM27970-03	48,410	0	08-83	BIO		21310
MC HENRY, CHARLES S	5	R01 GM25457-05	45,802	1	08-83	BIO		21200
MC INTOSH, J RICHARD	1	R01 GM30213-01	91,694	2	03-83	CBY		22250
MC INTOSH, THOMAS J	5	R01 GM27278-03	62,895	0	06-83	BBCB		22550
MC INTOSH, TRACY K	1	R01 GM31078-01	81,777	2	06-83	SAT		13410
MC IVER, ROBERT T, JR	5	R01 GM27039-03	57,771	0	11-82	SSS		12840
MC KANNA, JAMES A	5	R01 GM27153-03	107,471	0	06-83	CP		22200
MC KEEHAN, WALLACE L	5	R01 GM30341-02	90,132	0	12-82	CBY		22450

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
MC KENNA, CHARLES E	1	R01 GM31716-01	132,442	2	06-83	SSS		22400
MC LAFFERTY, FRED W	2	R01 GM16609-14	236,298	4	12-82	BMT		12840
MC LAUGHLIN, CALVIN S	5	R01 GM28772-15	146,513	3	02-83	PC		21320
MC LAUGHLIN, STUART G	5	R01 GM24971-05	119,074	1	08-83	BBCB		22300
MC MAHON, DANIEL S	5	R01 GM29830-02	110,186	1	03-83	MBC		22300
MC MILLIN, DAVID R	2	R01 GM22764-07	103,540	2	08-83	BMT		22500
MC MURRY, JOHN E	5	R01 GM28569-02	80,026	1	11-82	MCHA		11910
MC PHERSON, ALEXANDER	5	R01 GM27645-04	101,811	3	08-83	BBCB		22550
MC PHERSON, ALEXANDER	2	R01 GM27838-04	79,675	4	06-83	BBCB		22550
MC QUARRIE, DONALD A	5	R01 GM26864-04	45,392	1	11-82	BBCB		22600
MC REYNOLDS, LARRY A	5	R01 GM25692-03	79,208	0	09-82	GEN		21750
MEARES, CLAUDE F	2	R01 GM25909-04	71,563	4	11-82	BMT		21310
MEARS, JOHN G	7	R01 GM31696-01	125,404	0	06-83	MBY		21750
MEEHAN, EDWARD J, JR	5	R01 GM28652-02	35,983	1	11-82	BBCB		22550
MEHLER, ALAN H	5	R01 GM13037-17	116,533	1	03-83	BIO		22400
MEHLHORN, ROLF J	5	R01 GM24273-03	67,328	0	12-82	BBCB		22300
MEINDL, JAMES D	5	P01 GM17940-13	983,580	0	08-83	SSS		12400
MEISLER, MIRIAM H	5	R01 GM24872-06	113,970	3	05-83	MGN		21320
MEISTER, ALTON	1	R13 GM00041-01	2,000	0	12-82	N5S		22500
MELA, LEENA M	5	R01 GM28889-03 JF	146,572	2	08-83	SAT		13420
MELLMAN, IRA S	5	R01 GM29765-02	81,403	2	06-83	CP		22300
MENDELSOHN, RICHARD	1	R01 GM29864-01	80,421	2	01-83	BBCB		22300
MENNINGER, JOHN R	5	R01 GM20626-07 AM	74,903	0	08-83	PC		21320
MERRICK, WILLIAM C	5	R01 GM26796-03	85,991	0	03-83	PC		21320
MERYMAN, HAROLD T	2	R01 GM17959-10	158,735	2	02-83	SAT		13900

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
MESCHER, ANTHONY LOUIS	5	R01 GM31080-02	39,123	0	05-83	CBY		13410
MESELSON, MATTHEW S	5	R01 GM22274-08	273,549	2	06-83	GEN		21750
METZENBERG, ROBERT L, JR	5	R01 GM08995-21	83,518	1	12-82	GEN		21750
MEUZELAAR, HENDRIK L	5	R01 GM28581-02	96,168	1	02-83	SSS		12840
MEYER, BARBARA J	1	R01 GM30702-01	126,242	2	08-83	GEN		21700
MEYER, RALPH R	1	R01 GM31196-01	84,176	2	08-83	MG		21200
MEYER, RICH B, JR	5	R01 GM29291-02	58,307	0	11-82	MCHA		11930
MEYER, TERRANCE E	3	R01 GM18528-21S1	29,166	0	11-82	PB		22500
MEYERHOFF, MARK E	5	R01 GM28882-02	57,833	1	03-83	BMT		12400
MEYEROWITZ, ELLIOT M	5	R01 GM28075-03	107,820	0	06-83	GEN		21700
MICHAELS, JOHN E	5	R01 GM24604-03	35,524	0	12-82	CBY		22200
MICHELS, CORINNE A	5	R01 GM28216-08	138,744	0	06-83	GEN		21750
MICHL, JOSEF	1	R01 GM29984-01	42,636	1	01-83	BBCA		22500
MIDELFORT, CHRISTIAN F	5	R01 GM24667-05	106,222	2	12-82	PB		22400
MIDLAND, M MARK	1	R01 GM30081-01	66,472	2	07-83	MCHA		11940
MIDLAND, M MARK	5	R01 GM24517-05	82,530	1	12-82	BMT		11940
MILLER, ARNOLD L	5	R01 GM29262-03	83,028	0	08-83	CBY		22400
MILLER, CAROL L	2	R01 GM25896-04	92,702	2	12-82	SAT		13410
MILLER, DAVID L	1	R01 GM30800-01	89,885	3	08-83	MG		21320
MILLER, EDWARD D, JR	5	R01 GM24313-06	70,933	0	06-83	SAT		13200
MILLER, JON P	2	R01 GM25697-04	146,453	2	11-82	BIO		22400
MILLER, KENNETH R	5	R01 GM28799-02	66,345	0	02-83	CTY		22450
MILLER, KENNETH R	3	R01 GM28799-02S1	34,399	0	02-83	CTY		22450
MILLER, MARVIN J	2	R01 GM25845-04 AM	71,899	2	08-83	BMT		11920
MILLER, MARVIN J	2	R01 GM26867-04	120,723	2	06-83	BNP		11930

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
MILLER, MORTON W	5	R01 GM22680-08	154,481	2	04-83	RNM		12910
MILLER, ORLANDO J	5	R01 GM25193-05	137,075	1	03-83	MGN		21480
MILLER, OSCAR L, JR	5	R01 GM21020-06	116,131	0	11-82	GEN		21600
MILLER, RONALD D	5	R01 GM26403-03	43,145	0	11-82	PHRA		13200
MILLER, RUPERT G, JR	5	R01 GM21215-08	121,499	0	06-83	SSS		12100
MILLETT, FRANCIS S	2	R01 GM20488-10	82,801	2	07-83	BBCB		22500
MILLS, DALLICE I	5	R01 GM24040-05	69,897	0	08-83	GEN		21700
MINDICH, LEONARD E	9	R01 GM31709-16	168,161	4	07-83	MBC		22300
MINKLEY, EDWIN G, JR	5	R01 GM28925-03	101,690	0	07-83	MG		21280
MISELIS, RICHARD R	5	R01 GM27739-03	52,911	0	08-83	BPO		13700
MISHRA, NAWIN C	5	R01 GM29216-03	69,597	0	08-83	MGN		21200
MITCHELL, ALLEN A	5	R01 GM24781-05	448,855	0	04-83	EDC		11780
MITCHELL, HERSCHEL K	2	R01 GM25966-04	102,300	2	03-83	GEN		21700
MITCHELL, JERRY R	5	P01 GM26611-04	352,965	0	07-83	PTR		11300
MITSCHER, LESTER A	5	R01 GM26553-03	64,807	0	12-82	MCHA		11910
MODRICH, PAUL L	5	R01 GM23719-07	219,480	3	07-83	BIO		21200
MOFFAT, JOHN K	5	R01 GM29044-02	137,293	3	04-83	BBCB		22550
MOFFETT, DAVID F	5	R01 GM26287-03	42,974	0	09-82	PHY		22300
MOLANDER, GARY A	1	R01 GM31013-01	66,441	2	07-83	BMT		11940
MOLDAVE, KIVIE	5	R01 GM27999-03	114,676	0	08-83	BIO		21320
MOLINEUX, IAN J	5	R01 GM26183-03	68,980	0	03-83	MBC		21200
MOODY, FRANK G	*5	P50 GM23095-07	436,445	2	06-83	SRC		13300
MOORE, GORDON P	5	R01 GM28851-02	85,362	1	03-83	GEN		21600
MOORE, STANFORD	5	R01 GM25323-05	127,655	0	06-83	PBC		22400
MORAWETZ, HERBERT	5	R01 GM05811-22	75,328	0	06-83	BBCB		11920

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
MORGAN, EDWARD A	5	R01 GM27664-03	59,118	0	05-83	MBC		21750
MORGAN, STEPHEN L	5	R01 GM27135-03	45,296	0	07-83	SSS		11940
MORISHIMA, HISAYO O	1	R01 GM29571-01	173,229	2	03-83	PHRA		11780
MORRIS, DAVID R	5	R01 GM13957-16 HD	88,616	0	04-83	PC		21320
MORRIS, MICHAEL D	5	R01 GM28484-02	47,073	1	12-82	SSS		12840
MORRIS, N RONALD	5	R01 GM29228-02	157,331	3	05-83	MBY		22250
MORRISON, GEORGE H	5	R01 GM24314-06	72,972	0	06-83	SSS		12930
MORRISON, MARCELLE R	5	R01 GM27214-03	55,471	0	12-82	PC		21320
MORROW, KENNETH J, JR	5	R01 GM27268-03	27,903	0	11-82	MGN		21480
MORSE, DANIEL E	5	R01 GM25652-05	101,976	1	06-83	CP		21750
MORTON, NEWTON E	5	R01 GM17173-13	239,004	2	02-83	SSS		21400
MOSES, MONTROSE J	5	R01 GM23047-07	82,377	0	06-83	MGN		21800
MOSES, ROBB E	5	R01 GM24711-05	87,799	3	07-83	CPA		21250
MOSES, ROBB E	2	R01 GM19122-10A1	91,183	2	08-83	BIO		21200
MOSIG, GISELA	5	R01 GM13221-18	148,537	0	08-83	GEN		21200
MOSTELLER, RAYMOND D	5	R01 GM23292-06	80,271	0	03-83	MBC		22500
MOTULSKY, ARNO G	*2	P50 GM15253-16	673,477	4	05-83	SRC		21915
MOUDRIANAKIS, EVANGELOS N	5	R01 GM25683-04	86,565	1	04-83	BIO		22450
MOUNT, DAVID W	5	R01 GM24496-05	122,366	3	12-82	MG		21200
MOUNTCASTLE, DONALD B	5	R01 GM28338-03	57,465	0	06-83	BBCB		22300
MOWSHOWITZ, DEBORAH B	5	R01 GM25137-03	53,060	0	02-83	GEN		21750
MUELLER, PAUL H	5	R01 GM25256-06	100,008	1	08-83	BBCB		22300
MUKERJEE, PASUPATI	5	R01 GM26078-03	32,394	0	12-82	BBCA		22500
MULDOON, SHEILA M	5	R01 GM25926-04	29,126	0	02-83	SAT		13200
MULLINS, JAMES M	5	R01 GM26802-03	29,226	0	02-83	CBY		22250

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
MUNCK, ECKARD	5	R01 GM22701-07	65,208	3	02-83	BBCB		22500
MUNK, MORTON E	5	R01 GM21703-06	106,685	0	12-82	SSS		11940
MURGOLA, EMANUEL J	5	R01 GM21499-08	60,175	3	02-83	MG		21320
MURPHY, ALEXANDER J	1	R01 GM31083-01	78,380	2	08-83	PB		22300
MURPHY, DOUGLAS B	5	R01 GM26155-05	92,144	2	07-83	MBY		22250
MURPHY, EDMOND A	5	R01 GM24736-05	114,835	1	12-82	MGN		21400
MURPHY, ELLEN	5	R01 GM27253-03	79,462	0	11-82	MBC		21780
MURRAY, JOHN M	1	R01 GM30814-01	114,822	2	06-83	CTY		22250
MUSICH, PHILLIP R	1	R01 GM30600-01	84,406	2	04-83	MBY		21600
MUSKER, W KENNETH	5	R01 GM28063-03	57,814	0	06-83	BMT		11920
NADAL-GINARD, BERNARDO	1	R01 GM31281-01	146,818	4	06-83	MBY		21700
NAFIE, LAURENCE A	5	R01 GM23567-05	75,524	1	07-83	BBCB		12840
NAGLE, JOHN F	2	R01 GM21128-08	68,567	2	11-82	BBCB		22300
NAIDER, FRED R	5	R01 GM22086-08	72,882	1	04-83	PB		22300
NAKAMOTO, TOKUMASA	5	R01 GM27263-03	107,207	0	11-82	MBC		21320
NALL, BARRY T	5	R01 GM25463-03	36,823	0	11-82	BBCA		22500
NANNEY, DAVID L	2	R01 GM07779-20	151,087	4	02-83	GEN		21700
NEGISHI, EI-ICHI	2	R01 GM27947-03	78,119	2	08-83	BMT		11940
NEI, MASATOSHI	2	R01 GM20293-10	85,298	4	01-83	GEN		21800
NEIDHARDT, FREDERICK C	5	R01 GM17892-13	124,757	0	08-83	MBC		21320
NELSEN, STEPHEN F	1	R01 GM29549-01A1	58,104	2	06-83	MCHA		11940
NELSON, DANIEL A	1	R01 GM29442-01A1	81,865	2	06-83	CTY		21600
NELSON, DAVID L	1	R01 GM31098-01	80,380	2	06-83	BIO	1	22200

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
NELSON, RONALD J	5	R01 GM24300-05	89,665	1	02-83	SB		12350
NELSON, SIDNEY D	2	R01 GM25418-04A1	73,079	2	03-83	PHRA		11890
NELSON, WENDEL L	5	R01 GM25373-03	52,934	0	11-82	PHRA		11860
NEUMAN, RONALD D	1	R01 GM28438-01	12,454	0	01-83	BBCB		22300
NEURINGER, LEO J	5	R01 GM28149-02	96,094	1	03-83	BBCB		22300
NEVINS, JOSEPH R	2	R01 GM26765-04	110,869	2	06-83	MBY		21750
NEWKOME, GEORGE R	5	R01 GM20985-09	33,822	0	06-83	BMT		11920
NEWKOME, GEORGE R	5	R01 GM24053-03	30,758	0	09-82	BMT		11920
NEWLON, CAROL S	5	R01 GM21510-08	112,702	2	11-82	GEN		21200
NEWTON, AUSTIN	5	R01 GM22299-08	134,831	3	08-83	MBC		21700
NEWTON, AUSTIN	2	R01 GM25644-05	104,104	4	06-83	MG		21700
NGUYEN-HUU, X	2	R01 GM22940-07	120,337	2	07-83	SSS	1	12820
NGUYEN-HUU, XUONG	2	R01 GM20102-10	175,794	0	07-83	BBCB		12840
NICHOLAS, KENNETH M	2	R01 GM26760-04	51,963	2	06-83	BMT		11940
NICKLAS, R BRUCE	5	R01 GM13745-17	81,179	3	12-82	CBY		22250
NICKON, ALEX	5	R01 GM06304-19	102,524	0	08-83	MCHA		11910
NICOLAOU, KYRIACOS C	2	R01 GM26879-04	128,102	1	08-83	MCHA		11910
NIEDERMAN, ROBERT A	5	R01 GM26248-04	92,430	1	03-83	MBC		22300
NIERLICH, DONALD P	5	R01 GM15381-12	57,888	0	12-82	MBC		21750
NIERMAN, WILLIAM C	1	R01 GM29384-01	55,707	2	03-83	GEN		21750
NILES, EDWARD G	5	R01 GM23259-06	62,578	0	07-83	PBC		21750
NILES, EDWARD G	3	R01 GM23259-06S1	10,131	0	07-83	GEN		21750
NILES, EDWARD G	3	R01 GM23259-06S2	25,328	0	07-83	GEN		21750
NILSEN, TIMOTHY W	1	R01 GM31528-01	62,186	2	07-83	MBY		21320
NINNEMANN, JOHN L	5	R01 GM29223-03	123,640	0	08-83	SAT		13410

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
NINNEMANN, JOHN L	5	R01 GM29226-02	82,111	1	03-83	SAT		13410
NISHIKURA, KAZUKO	1	R01 GM31060-01	124,400	2	07-83	CTY		21750
NISHIMURA, JONATHAN S	5	R01 GM17534-12	77,160	1	08-83	PBC		22400
NISHIURA, JAMES T	5	R01 GM23456-05	33,614	1	12-82	GEN		21310
NITOWSKY, HAROLD M	*5	P50 GM19100-10	682,992	0	11-82	SSS		21917
NJUS, DAVID L	1	R01 GM30500-01	42,882	2	08-83	PB		22450
NODA, LAFAYETTE H	5	R01 GM23123-25	150,479	0	08-83	PB		22400
NOLL, HANS	2	R01 GM26968-04	133,703	2	07-83	CP		22200
NOLLER, HARRY F, JR	5	R01 GM17129-12	143,093	2	04-83	MBY		21320
NOMURA, MASAYASU	5	R01 GM20427-10	255,827	0	05-83	GEN		21320
NOMURA, MASAYASU	5	R01 GM28003-03	84,080	0	01-83	MBY		21320
NONNER, WOLFGANG F	5	R01 GM30377-02	154,126	1	07-83	PHY		22300
NOVAK, RAYMOND F	5	R01 GM27836-03	69,281	0	03-83	BIO		11760
NOVICK, RICHARD P	2	R01 GM14372-16	146,355	4	11-82	MG		21200
NOVITSKI, EDWARD	5	R01 AI GM18678-12	84,042	1	08-83	GEN		21600
NOVOTNY, MILOS V	2	R01 GM24349-04	88,072	2	11-82	BMT		12820
NOZAKI, YASUHIKO	1	R01 GM30900-01	71,797	1	06-83	BBCA		22500
NUCCITELLI, RICHARD L	1	R01 GM30062-01	84,850	2	08-83	CBY		22300
NUNN, WILLIAM D	5	R01 GM22466-07	71,353	1	07-83	MBC		22400
NUNN, WILLIAM D	3	R01 GM22466-07S1	36,974	1	07-83	MBC		22400
NYBORG, WESLEY L	5	R01 GM08209-18	157,396	0	06-83	RNM		12910
O'BRIEN, THOMAS W	2	R01 GM23322-04	80,752	2	08-83	MBY		21320
O'BRIEN, THOMAS W	5	R01 GM15438-13	63,163	0	11-82	MBY		21320

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
O'BRIEN, THOMAS W	2	R01 GM25888-04A1	85,607	2	07-83	EH		11790
O'BRIEN, WILLIAM D, JR	1	R01 AM GM30481-01	35,181	2	04-83	RNM		12910
O'BRIEN, WILLIAM D, JR	5	R01 GM24994-04	126,206	0	12-82	RAD		12910
O'CONNOR, MARY L	5	R01 GM27766-03	48,279	0	03-83	MBC		22400
O'DONNELL, MARTIN J	5	R01 GM28193-03	68,849	0	07-83	MCHA		11930
O'FARRELL, PATRICK	1	R01 GM30756-01	97,644	2	04-83	CTY		21700
OATES, JOHN A	*5	P50 CA GM15431-15	1,517,625	0	11-82	SSS		11300
OESCHGER, MAX P	5	R01 GM29851-02	93,870	0	06-83	MBC		21750
OESCHGER, MAX P	3	R01 GM29851-02S1	34,127	0	06-83	MG		21750
OGATA, RONALD T	5	R01 GM29831-02	116,522	1	03-83	ALY		21750
OGILVIE, JAMES W	5	R01 GM27840-03	44,757	0	09-83	BIO		22400
OHKI, SHINPEI	5	R01 GM24840-05	73,286	1	03-83	BBCB		22300
OHNISHI, S TSUYOSHI	1	R01 GM30703-01	72,079	2	04-83	SAT		13200
OHTSUBO, EIICHI	5	R01 GM22007-08	152,033	3	01-83	MG		21780
OIE, SVEIN	5	R01 GM25807-03	57,893	0	11-82	PHRA		11880
OIE, SVEIN	5	R01 GM28423-03	88,368	0	07-83	SSS		11880
OJAKIAN, GEORGE K	5	R01 GM25125-03	47,421	0	03-83	CBY		22300
OJAKIAN, GEORGE K	3	R01 GM25125-03S1	82,500	0	03-83	SSS		22300
OKARMA, THOMAS B	1	R01 GM31225-01	112,689	2	06-83	BIO	1	21320
OLAH, GEORGE A	5	R01 GM24832-06	142,367	0	06-83	BBCA		11920
OLDEN, KENNETH	1	R01 GM29804-01	186,925	2	12-82	PBC		22410
OLINS, ADA L	1	R01 GM29429-01	85,197	2	08-83	CTY		21600
OLINS, DONALD E	2	R01 GM19334-11	104,076	4	08-83	BBCA		21600
OLIVERA, BALDOMERO M	5	R01 GM22737-04	82,948	0	03-83	PC		11910
OLIVERA, BALDOMERO M	5	R01 GM25654-04	48,650	1	01-83	MBY		22400

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
OLIVERA, BALDOMERO M	5	R01 GM26107-12	100,107	1	04-83	PC		21200
OLMSTED, JOANNA B	2	R01 GM22214-07	133,154	4	02-83	MBY		22250
OLSON, JAMES	5	R01 GM08822-20	87,259	0	03-83	PC		22400
OLSON, MARK O	5	R01 GM28349-03	91,295	0	06-83	CTY		21600
OLSON, MAYNARD V	5	R01 GM27889-03	73,205	0	03-83	GEN		21750
OLSON, MAYNARD V	5	R01 GM28232-03	114,293	2	07-83	GEN		21600
OLSON, WILMA K	5	R01 GM20861-09	82,031	0	07-83	BBCA		21100
ONORATO-SHOWE, LOUISE C	7	R01 GM32019-01	43,070	2	06-83	MGN		21600
OPELLA, STANLEY J	5	R01 GM24266-06	116,368	0	07-83	BBCB		22500
OPELLA, STANLEY J	1	R01 GM29754-01	63,871	2	12-82	BBCB		22500
OPPENHEIMER, NORMAN J	2	R01 GM22982-07	109,579	4	04-83	BIO		22400
ORDAHL, CHARLES P	7	R01 GM32018-01	96,795	3	06-83	GEN		21700
ORGEL, LESLIE E	2	R01 GM13435-16A1	118,186	2	06-83	BNP		21310
ORIAS, EDUARDO	5	R01 GM28444-02	97,928	1	11-82	MG		21700
ORIAS, EDUARDO	2	R01 GM19290-10A1	90,165	3	03-83	GEN		21700
ORME-JOHNSON, WILLIAM H	1	R01 GM30943-01 AI	208,723	3	06-83	SSS	1	22400
ORME-JOHNSON, WILLIAM, III	5	R01 GM28358-04	121,443	1	06-83	BBCB		22500
ORNSTON, L NICHOLAS	5	R01 GM25487-03	83,101	0	11-82	BIO		22400
ORNSTON, L NICHOLAS	3	R01 GM25487-03S1	19,206	0	11-82	BIO		22400
ORR, GEORGE A	5	R01 GM27851-03	125,635	0	03-83	CBY		22300
ORR, GEORGE A	5	R01 GM28170-03	109,253	0	06-83	MBC		22300
ORTIZ DE MONTELLANO, PAUL R	5	R01 GM25515-05	86,477	1	06-83	PHRA		11760
OTHMER, HANS G	2	R01 GM29123-03	74,232	3	08-83	SSS	6	12200
OVERMAN, LARRY E	1	R01 GM30859-01	81,032	2	07-83	MCHA		11940
OXENDER, DALE L	2	R01 GM20737-09	145,893	4	03-83	CP		22300

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
OXENDER, DALE L	5	R01 GM11024-19	115,624	2	07-83	SSS		22300
OZOLS, JURIS B	5	R01 GM26351-04	124,269	1	06-83	BIO		22300
PACE, NORMAN R	5	R01 GM20147-10	192,512	0	06-83	MBY		21320
PACK, GEORGE R	5	R01 GM29079-02	62,718	1	03-83	BBCA		21100
PACKMAN, SEYMOUR	5	R01 GM28838-03	101,505	0	07-83	MGN		21750
PAGANO, RICHARD E	5	R01 GM22942-07	105,471	1	02-83	MBY		22300
PAGE, TERRY L	1	R01 GM30039-01	43,240	2	11-82	BPO		13700
PAIGEN, KENNETH	1	R01 GM31656-01 NS	364,719	1	04-83	SSS		21700
PAINE, PHILIP L	2	R01 GM26734-04	108,683	3	06-83	MBY		22200
PALADE, GEORGE E	*5	P50 GM21714-08	597,050	2	11-82	SSS		22300
PALADE, GEORGE E	5	R01 GM27303-03	119,126	2	11-82	MBY		22300
PALATNIK, CARL M	2	R01 GM27652-04	133,267	2	06-83	CTY		21700
PALMER, GRAHAM A	5	R01 GM21337-08	139,998	1	05-83	BMT		22450
PANTAZIS, NICHOLAS J	5	R01 GM28644-02	59,410	1	11-82	CP		22200
PAOLETTI, ENZO	5	R01 GM23853-06	92,068	0	03-83	EVR		21320
PAPAHADJOPOULOS, DEMETRIOS	5	R01 GM26369-05	81,752	1	08-83	BBCB		22300
PAPAHADJOPOULOS, DEMETRIOS	5	R01 GM28117-03	63,932	1	07-83	BBCB		22300
PAQUETTE, LEO A	5	R01 GM28468-03	75,450	0	06-83	MCHA		11910
PARDEE, ARTHUR B	5	R01 GM24571-05	147,118	1	04-83	CP		22200
PARDUE, HARRY L	5	R01 GM13326-15	112,151	0	11-82	BMT		12820
PARDUE, MARY L	5	R01 GM21874-08	155,132	2	01-83	GEN		21750
PARK, JANE H	5	R01 GM07884-21	97,685	2	03-83	BIO		22400
PARKER, CARL S	5	R01 GM29430-02	95,109	1	08-83	GEN		21750

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
PARKER, JACK M	2	R01 GM25855-04	98,006	3	05-83	MG		21320
PARKINSON, JOHN S	5	R01 GM28706-02	65,433	1	11-82	GEN		21750
PARKINSON, JOHN S	2	R01 GM19559-10	106,239	4	05-83	MG		22200
PARMENTIER, JAMES L	5	R01 GM24936-05	110,520	1	03-83	SAT		13200
PARR, ROBERT G	5	R01 GM22028-08	63,406	2	02-83	BBCA		22600
PARRY, RONALD J	2	R01 GM26166-04	55,431	2	11-82	BNP		11920
PARRY, RONALD J	5	R01 GM26569-04	54,911	1	11-82	BNP		11910
PARTHASARATHY, RENGACHARY	5	R01 GM24864-08	53,163	0	11-82	BBCA		21100
PATO, MARTIN L	5	R01 GM24270-05	82,935	3	12-82	MG		21780
PAULE, MARVIN R	2	R01 GM22580-07	103,400	2	03-83	PBC		21750
PAULSON, JAMES C	5	R01 GM27904-03	64,593	0	03-83	PC		22410
PEARSON, ANTHONY J	1	R01 GM30373-01	110,196	2	07-83	MCHA		11910
PEARSON, ROBERT H	5	R01 GM27274-03	53,591	0	12-82	BBCB		22550
PECORA, ROBERT	5	R01 GM22517-07	60,864	0	03-83	BBCB		12840
PEDERSON, THORU	5	R01 GM21595-08	201,855	1	11-82	MBY		21750
PEDERSON, THORU	5	R01 GM28274-03	77,067	0	06-83	GEN		21750
PEGG, ANTHONY E	2	R01 GM26290-04	86,893	4	03-83	BIO		22400
PEISACH, JACK	1	R01 GM30012-01A1	294,741	2	07-83	SSS		12840
PELLEGRINI, MARIA C	1	R01 GM30443-01	82,193	2	04-83	MBY		21320
PELLEGRINI, MARIA C	5	R01 GM24572-05	88,600	1	12-82	GEN		21700
PENEFSKY, HARVEY S	5	R01 GM21737-16	129,118	2	12-82	BIO		22450
PENNINGROTH, STEPHEN M	1	R01 GM31229-01	58,446	2	06-83	MBY		22250
PENNISTON, JOHN T	5	R01 GM28835-03	89,476	2	07-83	PB		22300
PERACCHIA, CAMILLO	5	R01 GM20113-09	116,934	0	02-83	MBY		22300
PERKINS, JOHN P	5	R01 GM29522-02	93,441	3	06-83	PHRA		11770

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
PERRY, JACQUELIN	5	R01 GM26395-03	99,504	0	09-82	AFY		12320
PERSON, STANLEY	5	R01 GM27819-02	79,268	1	12-82	MG		21250
PETERING, DAVID H	1	R01 GM29583-01A1	120,472	2	03-83	TOX		22500
PETERS, RICHARD M	2	R01 GM24901-06 ES	117,571	4	06-83	SAT		13410
PETERSEN, NANCY S	1	R01 GM30442-01	43,038	1	06-83	GEN		22200
PETERSON, JULIAN A	5	R01 GM19036-14	69,934	2	04-83	BIO		11860
PETERSON, SCOTT W	5	R01 GM28832-03	61,087	0	07-83	CBY		22300
PETES, THOMAS D	5	R01 GM24110-06	142,035	2	07-83	GEN		21600
PETHICA, BRIAN A	5	R01 GM24068-05	5,756	0	03-83	BBCB		22300
PETICOLAS, WARNER L	5	R01 GM15547-16	105,580	0	08-83	BBCB		22500
PETRI, WILLIAM H	5	R01 GM24185-06	86,071	0	08-83	GEN		21700
PETSKO, GREGORY A	1	R01 GM31212-01	23,104	2	06-83	BBCB		22550
PETSKO, GREGORY A	5	R01 GM27123-03	35,650	0	11-82	BBCB		22550
PETTIGREW, DONALD W	1	R01 GM30911-01	64,512	2	08-83	PB		22400
PETTIJOHN, DAVID E	5	R01 GM18243-11	86,777	3	11-82	CTY		21600
PFAHL, MAGNUS	5	R01 GM23671-06	92,099	2	12-82	MBC		21750
PHAFF, H J	5	R01 GM16370-12	84,485	0	11-82	BM		21800
PICKETT-HEAPS, J D	5	R01 GM27124-03	64,096	1	02-83	CBY		22250
PIECZENIK, GEORGE	5	R01 GM23550-06	54,421	0	08-83	GEN		21800
PIERCE, SIDNEY K	5	R01 GM23731-06	67,210	0	03-83	PHY		22300
PIERUCCI, OLGA	5	R01 GM21006-06	38,739	0	03-83	MBC		22300
PIGIET, VINCENT P, JR	5	R01 GM20122-10	78,854	1	06-83	PBC		22400
PINON, RAMON, JR	5	R01 GM26742-03	84,517	0	12-82	CBY		21600
PIOUS, DONALD A	5	R01 GM15883-18	121,746	0	01-83	GEN		21400
PIPERNO, GIANNI	5	R01 GM28702-02	79,720	1	01-83	CBY		22250

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
PITTENDRIGH, COLIN S	5	R01 GM28803-03	90,084	0	06-83	BPO		13700
PIZER, RICHARD D	5	R01 GM24748-03	28,694	0	12-82	MCHB		11920
PIZIALI, ROBERT L	5	R01 GM28827-03	80,646	0	06-83	AFY		12320
PLATE, CHARLES A	5	R01 GM27077-03	60,826	0	12-82	MBC		21280
PLATT, TERRY	5	R01 GM22830-07	176,917	1	02-83	MBC		21750
PLUMMER, T H, JR	1	R01 GM30471-01	34,267	2	04-83	PC		22410
POLAVARAPU, PRASAD L	1	R01 GM29375-01	95,503	2	01-83	BBCA		22500
POLISKY, BARRY A	5	R01 GM24212-06	102,889	2	06-83	MG		21200
POLLARD, RICHARD B	5	R23 GM27098-03	46,880	0	12-82	VR		13450
POLLARD, THOMAS D	5	R01 GM26132-05	128,816	0	06-83	CBY		22250
POLLARD, THOMAS D	2	R01 GM26338-05	150,618	4	08-83	MBY		22250
POO, MU-MING	1	R01 GM30666-01	133,705	2	04-83	CTY		22300
POODRY, CLIFTON A	5	R01 GM20401-09	79,588	0	06-83	GEN		21700
PORTER, KEITH R	5	R01 GM27324-03	109,675	0	02-83	CBY		22250
PORTER, RONALD D	2	R01 GM26422-04	76,391	2	03-83	MG		21200
PORTER, RONALD D	5	R01 GM28609-02	82,007	1	01-83	MG		21780
POSNER, GARY H	1	R01 GM30052-01A1	77,080	2	08-83	MCHA		11940
POSTLETHWAIT, JOHN H	5	R01 GM21548-08	85,346	2	11-82	GEN		21700
POTTER, STANLEY S	1	R01 GM30816-01	102,028	2	06-83	GEN		21780
POULTER, C DALE	5	R01 GM21328-08	150,738	3	05-83	BNP		11920
POULTER, C DALE	2	R01 GM25521-04	99,417	2	03-83	BNP		11910
POWERS, EDWARD L	5	R01 GM13557-16	114,148	3	03-83	RAD		21250
POWERS, JAMES C	5	R01 GM25181-05	96,720	0	03-83	BBCB		22500
POWIS, GARTH	5	R01 GM27590-03	106,705	0	11-82	PHRA		11860
POYTON, ROBERT O	5	R01 GM30228-02	93,823	2	06-83	MBC		21320

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
POYTON, ROBERT O	5	R01 GM29838-02	59,468	1	06-83	PB		22450
PRAKASH, LOUISE	2	R01 GM19261-10A1	109,905	4	11-82	RAD		21250
PRASAD, PARAS N	5	R01 GM27357-03	43,469	0	12-82	BBCA		22500
PRENDERGAST, FRANKLIN G	1	R01 GM30178-01A1	51,642	2	06-83	PB		22500
PRENDERGAST, FRANKLYN G	1	R01 GM31241-01	75,677	2	06-83	BBCB		22500
PRENTICE, ROSS L	5	R01 GM24472-05	38,105	0	12-82	SSS		13901
PRENTICE, ROSS L	5	R01 GM28314-03	78,474	0	07-83	SSS		13901
PRESCOTT, DAVID M	5	R01 GM19199-11	151,134	2	07-83	CTY		21600
PRESTEGARD, JAMES H	5	R01 GM19035-11	98,884	3	12-82	SSS		22300
PRESTON, KENDALL, JR	5	R01 GM28221-02	176,815	2	12-82	SSS		12990
PRIANO, LAWRENCE L	5	R23 GM27172-03	32,738	0	12-82	SAT		13250
PRINGLE, JOHN R	1	R01 GM31006-01	106,342	2	06-83	GEN		21700
PROCUNIER, JAMES D	5	R01 GM28008-03	69,778	0	06-83	GEN		21600
PROHOFSKY, EARL W	5	R01 GM24443-05	85,414	0	12-82	BBCA		21100
PROUDFIT, HERBERT K	5	R01 GM25998-03	41,619	0	12-82	SAT		13700
PTASHNE, MARK	1	R01 GM31139-01	91,811	2	06-83	MG		21250
PTASHNE, MARK	1	R01 GM29988-01	135,445	2	07-83	MG		21200
PTASHNE, MARK S	5	R01 GM29109-02	109,586	1	03-83	BBCA		21750
PUKKILA, PATRICIA J	5	R01 GM27863-03	64,706	0	03-83	GEN		21600
PULLMAN, MAYNARD E	5	R01 GM26924-03	80,998	2	11-82	BIO		22450
PURICH, DANIEL L	2	R01 GM24958-04	87,818	2	05-83	CBY		22250
QUATE, CALVIN F	5	R01 GM25826-04	158,907	0	11-82	SSS		12930
QUE, LAWRENCE, JR	5	R01 GM25422-05	106,799	3	06-83	BMT		22400

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
QUINN, WILLIAM G, JR	5	R01 GM25578-05	100,119	1	06-83	GEN		21400
QUIOCHO, FLORANTE A	2	R01 GM21371-08	135,541	4	11-82	BBCB		22550
RABAN, MORTON	5	R01 GM28123-03	42,013	0	06-83	BMT		11920
RADDING, CHARLES M	1	R01 GM30488-01	71,536	2	05-83	MG		21200
RAE, PETER M	2	R01 AI GM26378-04	156,116	4	03-83	GEN		21600
RAGHAVAN, SRINIVASA	5	R01 GM28207-03	95,677	0	07-83	CP		22300
RAIJMAN, LUISA J	5	R01 GM29432-02	64,150	1	07-83	BIO		22400
RAJAGOPALAN, K V	2	R01 GM00091-37	231,246	4	05-83	PC		22400
RAJBHANDARY, UTTAM L	5	R01 GM17151-13	171,298	0	05-83	PC		21320
RAKOWSKI-DU BOIS, MARY C	5	R01 GM25122-05	55,801	1	02-83	BMT		11920
RAMIREZ, FAUSTO	5	R01 GM20672-22	124,181	0	06-83	MCHA		21100
RANDALL, LINDA L	5	R01 GM29798-02	82,737	0	03-83	MBC		22300
RAO, DABEERU C	5	R01 GM28719-03	103,831	2	06-83	MGN		21400
RAPAPORT, FELIX T	2	R01 GM24481-05A1	240,462	2	04-83	SAT		13410
RAPOPORT, HENRY	1	R01 GM28994-01A1	110,734	4	04-83	BIO		22500
RAUCHER, STANLEY	5	R01 GM25816-03	53,304	0	03-83	MCHA		11910
RAVEL, JOANNE M	5	R01 GM18775-11	86,344	3	03-83	MBY		21320
RAY, WILLIAM J, JR	5	R01 GM08963-20	141,255	1	11-82	PB		22400
RAYFIELD, GEORGE W	2	R01 GM26669-04	69,674	2	08-83	BBCA		22300
RAYNER, MARTIN D	5	R01 GM29263-03	66,360	0	08-83	PHY		22300
REBEK, JULIUS, JR	2	R01 GM25912-04	92,205	2	11-82	BNP		11920
REBEK, JULIUS, JR	5	R01 GM27932-03	71,172	0	03-83	MCHA		11940
REBHUN, LIONEL I	5	R01 GM22407-06	74,424	0	12-82	MBY		22250

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
REBHUN, LIONEL I	5	R01 GM26784-03	80,421	0	12-82	CTY		22250
RECHNITZ, GARRY A	2	R01 GM25308-05	84,086	4	06-83	BMT		12820
RECHNITZ, GARRY A	5	R01 GM25312-03	32,155	0	11-82	BMT		12820
RECHSTEINER, MARTIN C	1	R01 GM30445-01	72,395	4	04-83	CTY		21600
RECHSTEINER, MARTIN C	5	R01 GM27159-03	79,073	2	12-82	CTY		21320
RECHSTEINER, MARTIN C	3	R01 GM27159-03S1	12,570	2	12-82	CTY		21320
RECORD, M THOMAS, JR	5	R01 GM23467-06	86,873	0	12-82	BBCA		21310
REDDY, JANARDIAN K	2	R01 GM23750-07	146,427	4	06-83	PTHB		22200
REDFIELD, ALFRED G	5	R01 CA GM20168-10	186,295	3	07-83	BBCA		22500
REDMAN, COLVIN M	1	R01 GM28559-01A1	97,497	2	08-83	CTY		22300
REECK, GERALD R	5	R01 GM29203-02	37,636	1	03-83	PC		21600
REED, LESTER J	5	R01 GM06590-24	141,192	2	07-83	BIO		22400
REED, PETER W	1	R01 GM29756-01	71,085	2	05-83	BIO		22200
REED, STEVEN I	5	R01 AI GM28005-03	84,568	0	06-83	GEN		21700
REEDER, RONALD H	5	R01 GM26624-04	106,158	1	07-83	MBY		21750
REEDER, RONALD H	5	R01 GM28780-02	110,217	1	03-83	MBY		21600
REEKE, GEORGE N, JR	5	R01 GM22663-08	67,198	1	08-83	BBCB		22550
REESE, ANDY C	5	R01 GM30720-02	80,320	0	07-83	EI		13410
REEVES, ROBERT H	5	R01 GM28354-03	45,318	0	01-83	PC		21320
REGIER, JEROME C	1	R01 GM29392-01	101,445	2	01-83	GEN		21700
REGNIER, FRED E	5	R01 GM25431-05	90,033	0	06-83	SSS		12820
REID, BRIAN R	5	R01 GM28764-03	102,526	1	08-83	PC		21100
REINHART, GREGORY D	1	R01 GM30884-01	62,519	2	07-83	BIO	1	22400
REINHOLD, VERNON N	5	P01 GM26625-04	427,447	1	08-83	SSS		22410
REVEL, JEAN P	3	P01 GM06965-23S1	142,305	1	02-83	SSS		22300

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
REVEL, JEAN-PAUL	5	P01 GM06965-23	563,336	1	02-83	SSS		22300
REVZIN, ARNOLD	2	R01 GM25498-04	89,484	2	12-82	BBCA		21750
REZNIKOFF, WILLIAM S	5	R01 GM19670-10	114,655	2	08-83	MBC		21750
RHA, CHOKYUN	5	R01 GM28534-02	60,393	1	01-83	BBCB		22500
RHOADS, ROBERT E	5	R01 GM20818-08	96,944	0	11-82	PC		21320
RHODES, R KENT	5	R01 GM27993-03	75,905	0	06-83	PBC		22200
RHODES, WILLIAM C	2	R01 GM23942-04	46,038	2	03-83	BBCA		22600
RICE, STUART A	5	R01 GM22728-07	89,869	0	02-83	BBCB		22600
RICH, DANIEL H	5	R01 GM29497-02	94,137	2	08-83	BNP		11430
RICHARDS, FREDERIC M	5	P01 GM22778-07	687,621	3	03-83	SSS		22550
RICHARDS, FREDERIC M	3	P01 GM22778-07S1	183,400	0	03-83	SSS		22550
RICHARDSON, DAVID C	5	R01 GM15000-13	168,540	1	05-83	BBCB		22550
RICHARDSON, JOHN P	5	R01 GM26038-03	43,477	0	04-83	BIO		21320
RIGBY, JAMES H	1	R01 GM30771-01 CA	59,356	2	04-83	MCHA		11910
RIGGS, ARTHUR D	2	R01 GM31263-02	221,245	4	11-82	MGN		21600
RIGGS, AUSTEN F, II	5	R01 GM21314-07	73,278	1	06-83	PBC		22500
RIGGS, AUSTEN F, II	5	R01 GM28410-02	68,121	3	12-82	PB		22500
RIGNEY, DAVID R	1	R01 GM30236-01	126,045	2	01-83	CP		22200
RIKANS, LORA E	5	R01 GM26480-03	40,548	0	03-83	NTN		11880
RILEY, MONICA	5	R01 GM28926-03	94,599	0	07-83	MG		21800
RILEY, WARD A, JR	5	R01 GM27755-03	74,586	0	06-83	RNM		12910
RINE, JASPER D	1	R01 GM31105-01	104,849	2	06-83	GEN		21750
RINEHART, KENNETH L, JR	5	R01 GM27029-13	107,664	1	04-83	SSS		12840
RINGOLD, GORDON M	2	R01 GM25821-04	178,946	4	11-82	MBY		21750
RIS, HANS	2	R01 GM04738-26A1	80,023	1	06-83	MBY		21600

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
RITCHIE, CALVIN D	5	R01 GM12832-14	37,153	.0	12-82	BBCA		11920
ROBBERSON, DONALD L	5	R01 GM27774-03	17,016	0	03-83	MBC		21600
ROBBINS, HERBERT E	5	R01 GM27976-03	92,632	0	06-83	SSS		12100
ROBERTS, JEFFREY W	5	R01 GM21941-08	145,815	3	01-83	MG		21750
ROBERTS, THOMAS M	1	R01 GM29994-01	50,949	2	12-82	TMP		22250
ROBERTSON, HUGH D	5	R01 GM27168-03	47,755	0	03-83	PBC		21320
ROBERTSON, HUGH D	5	R01 GM28294-03	111,116	0	07-83	VR		21320
ROBERTSON, J DAVID	5	R01 GM28224-03	152,733	0	06-83	SSS		22300
ROBERTUS, JON D	9	R01 GM30048-04 CA	67,802	2	02-83	BBCB		22550
ROBINSON, G WILSE	5	R01 GM23765-05	45,491	1	06-83	BBCA		12840
ROBINSON, NEAL C	5	R01 GM24795-05	73,441	3	12-82	PB		22300
ROBINSON, WILLIAM A	5	R01 GM25759-03	95,069	2	03-83	SAT		13410
ROBISON, GEORGE A	5	R01 GM27378-03	94,720	0	11-82	PHRA		11870
ROCK, CHARLES O	5	R01 GM28035-03	66,790	0	06-83	MBC		22300
ROCK, CHARLES O	5	R01 GM29053-02	89,408	1	03-83	MG		22300
RODERICK, THOMAS H	2	R01 GM19656-11	91,657	4	08-83	MGN		21480
RODGERS, MICHAEL A	2	R01 GM24235-04	99,336	2	12-82	CPA		11920
RODRIGUEZ, RAYMOND L	5	R01 GM29100-02	97,295	1	03-83	MG		21750
ROE, BRUCE A	7	R01 GM30399-01	59,925	0	08-83	PC		21600
ROE, BRUCE A	5	R01 GM30400-02	76,522	0	08-83	PC		21320
ROEDER, GLENNA S	5	R01 GM28904-02	95,161	1	03-83	GEN		21780
ROEDER, ROBERT G	1	R13 GM31095-01	2,000	0	05-83	MGN		21600
ROEHRIG, KARLA L	5	R01 GM GM29255-03	33,659	0	08-83	NTN		22400
ROESKE, ROGER W	5	R01 GM27170-03	88,954	0	11-82	BBCA		22300
ROMAN, HERSCHEL L	5	R01 GM27949-30	74,027	2	03-83	GEN		21200

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
ROSBASH, MICHAEL M	5	R01 GM23549-06	95,740	1	01-83	MBY		21320
ROSCOE, DENNIS D	1	R01 GM30838-01	97,569	2	08-83	ORTH		12350
ROSE, GEORGE D	5	R01 NS GM29458-02	30,554	0	11-82	BBCA		22500
ROSE, IRWIN A	5	R01 GM20940-19	100,159	1	12-82	PC		22400
ROSE, KATHLEEN M	5	R01 GM26740-04	41,501	1	06-83	BIO		21310
ROSE, ROBERT M	5	R01 GM28829-03	162,270	0	07-83	AFY		12300
ROSE, ZELDA B	5	R01 GM19875-11	106,758	2	08-83	PC		22400
ROSEN, BARRY P	5	R01 GM21648-08	77,865	0	06-83	BIO		22450
ROSEN, GERALD M	5	R01 GM25188-05	104,736	1	03-83	SAT		13420
ROSEN, GERALD M	5	R01 GM25753-04	125,426	1	11-82	SGYA		13420
ROSEN, ORA M	5	R01 GM29042-03	238,075	0	07-83	PTR		11770
ROSEN, STEVEN D	5	R01 GM23547-06	101,588	0	01-83	CBY		22200
ROSENBAUM, JOEL L	5	R01 GM14642-15	191,748	3	07-83	MBY		22250
ROSENBERG, JOHN M	5	R01 GM25671-05	81,146	1	06-83	BBCA		21200
ROSENBERG, JOHN M	5	R01 GM29207-02	90,852	1	03-83	BBCA		21200
ROSENBERG, LEON E	*5	P50 GM20124-10	807,840	0	03-83	SSS		21912
ROSENFELD, JOEL P	5	R01 GM23696-06	46,449	2	02-83	DABR		13700
ROSS, ELLIOTT M	2	R01 GM30355-02	118,728	4	07-83	MBY		11770
ROSSI, JOHN J	1	R01 GM30134-01	109,613	2	01-83	GEN		21750
ROSSKY, PETER J	1	R01 GM30452-01	50,656	2	04-83	BBCA		21100
ROSSMANN, MICHAEL G	5	R01 GM10704-20	145,537	0	05-83	BBCB		22550
ROTH, JOHN R	2	R01 GM23408-06	163,950	4	12-82	MG		21320
ROTH, JOHN R	5	R01 GM27068-03	52,103	0	11-82	MBC		21750
ROTHMAN, JAMES E	5	R01 GM25662-05	131,421	1	07-83	CBY		22300
ROTHSTEIN, RODNEY J	5	R01 GM27916-02	43,225	1	01-83	GEN		21600

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INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
ROTTENBERG, HAGAI	5	R01 GM28173-03	96,133	0	06-83	PB		22450
ROUFA, DONALD J	2	R01 GM23013-05A1	85,939	2	07-83	MGN		21320
ROUSH, WILLIAM R	2	R01 GM26782-04	92,003	2	06-83	MCHA		11940
ROWND, ROBERT H	2	R01 GM30731-02	225,480	4	08-83	MBY		21780
ROY, RABINDRA N	2	R01 GM26809-04 AI	15,317	2	06-83	BMT		12820
RUBENSTEIN, IRWIN	5	R01 GM24756-05	98,245	3	07-83	GEN		21700
RUBIN, BYRON H	5	R01 GM26905-03	39,298	0	07-83	BBCB		22550
RUBIN, BYRON H	5	R01 GM27907-03	45,420	0	04-83	BBCB		22550
RUBIN, CHARLES S	5	R01 GM22792-06	132,208	2	03-83	BIO		22400
RUBIN, GERALD M	5	R01 GM29054-03	130,584	1	08-83	CTY		21780
RUDDLE, FRANK H	5	R01 GM29111-02	193,538	1	06-83	SSS		21480
RUDDLE, FRANK H	5	R01 GM09966-21	563,886	2	08-83	MGN		21480
RUDNER, RIVKA	5	R01 GM16059-12	76,146	0	11-82	MBC		21250
RUDY, BERNARDO	5	R01 GM26976-03	68,923	0	03-83	BBCB		22300
RUPERT, CLAUD S	5	R01 GM16547-17	117,944	0	03-83	RAD		21250
RUPLEY, JOHN A	2	R01 GM24760-04	84,840	4	11-82	BBCA		22500
RUSH, BENJAMIN F, JR	1	R01 GM28964-01A1	111,755	2	01-83	SAT		13420
RUSSELL, FINDLAY E	5	R01 GM29277-02	77,440	1	12-82	TOX		11890
RUSSELL, PETER J	5	R01 GM22488-06	57,759	1	06-83	MBY		21320
RUSTAD, RONALD C	5	R01 GM26484-03	73,294	0	03-83	RAD		22200
RUSY, BEN F	1	R01 GM29527-01A1	38,064	2	04-83	SAT		13200
RUTTER, WILLIAM J	5	R01 GM28520-02	166,650	3	11-82	MBY		21750
RYDER, OLIVER A	2	R01 GM23073-07	99,887	2	07-83	MGN		21480

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
SABA, THOMAS M	5	R01 GM21447-08	88,150	1	11-82	SAT		13410
SABATINI, DAVID D	2	R01 GM20277-10	266,509	4	12-82	MBY		22300
SADLER, JOHN R	1	R01 GM30709-01	88,298	2	04-83	MG		21750
SADOWSKI, PAUL D	5	R01 AI GM24361-05	86,199	1	12-82	SSS		21320
SAELINGER, CATHARINE B	5	R01 GM24028-05	85,273	2	03-83	SAT		13410
SAENGER, PAUL H	5	R01 GM27259-03	86,418	0	10-82	PHRA		11760
SAGER, RUTH	5	R01 GM22874-08	182,134	3	06-83	MBY		21280
SAKAI, TED T	5	R01 GM27900-03	65,663	0	02-83	MCHA		21100
SALAS, MARGARITA	5	R01 GM27242-03	34,771	0	12-82	MBC		21200
SALEMME, FRANCIS R	1	R01 GM30393-01	52,050	2	04-83	BBCA		22600
SALEMME, FRANCIS R	5	R01 GM21534-09	79,075	0	07-83	BBCA		22550
SALISBURY, JEFFREY L	1	R01 GM29321-01A1	101,500	2	08-83	CP		22300
SALMON, EDWARD D	2	R01 GM24364-04	120,066	4	11-82	CBY		22250
SALOMON, ROBERT G	2	R01 GM21249-06A1	179,267	2	03-83	BNP		11910
SALOMON, ROBERT G	5	R01 GM29073-02	48,580	1	03-83	MCHA		11910
SALPETER, MIRIAM M	5	R01 GM10422-20	132,884	1	11-82	CBY		12930
SALSER, WINSTON A	5	R01 GM18586-11	97,968	2	02-83	GEN		21750
SALZMAN, GARY C	5	R01 GM26857-03	81,498	0	03-83	SSS		12990
SANADI, D RAO	5	R01 GM13641-16	171,341	2	06-83	PB		22450
SANADI, D RAO	5	R01 GM26764-03	76,588	0	12-82	BIO		22450
SANCES, ANTHONY, JR	5	R01 GM26956-03	87,694	0	12-82	SAT		13410
SANDLER, LAURENCE M	2	R01 GM09965-19	67,621	4	11-82	GEN		21700
SANDO, JULIANNE J	1	R01 GM31184-01	69,526	2	06-83	PBC		22200
SANGER, JOSEPH W	5	R01 CA GM25653-05	144,217	2	08-83	CBY		22250
SARKAR, NILIMA	2	R01 GM25022-04	77,770	2	03-83	BIO		21200

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
SARKAR, NILIMA	5	R01 GM26517-03	62,818	0	12-82	MBC		21320
SARMA, RAGHUPATHY	1	R01 GM30830-01	41,395	1	06-83	BBCB		22550
SARMA, RAMASWAMY H	9	R01 GM29787-11	75,321	4	08-83	BBCA		21100
SATIR, BIRGIT H	5	R01 GM27298-03	110,740	0	01-83	CBY		22300
SATIR, PETER	5	P01 GM27859-03	336,293	0	04-83	SSS		22300
SAUERBIER, WALTER	1	R01 GM30319-01A1	97,239	2	07-83	CTY		21600
SAVAGEAU, MICHAEL A	1	R01 GM30054-01	71,679	3	03-83	SSS		21750
SAWYER, DONALD T	5	R01 GM22761-06	62,410	0	11-82	BMT		11920
SCANDALIOS, JOHN G	5	R01 GM22733-07	65,999	1	07-83	GEN		21320
SCARBOROUGH, GENE A	2	R01 GM24784-06	132,800	4	05-83	SSS		22450
SCHACHMAN, HOWARD K	5	R01 GM12159-19	164,536	1	04-83	BBCA		22500
SCHAFER, DAVID E	5	R01 GM24704-05	68,300	1	03-83	SSS		22300
SCHEDL, PAUL	2	R01 GM25976-04	115,428	4	11-82	GEN		21700
SCHEFFLER, IMMO E	2	R01 GM18835-12	105,038	4	08-83	MGN		21750
SCHEINER, STEVE	5	R01 GM29391-02	46,972	1	06-83	BBCA		22600
SCHEKMAN, RANDY	2	R01 GM26755-04	139,980	4	06-83	CP		22300
SCHELLMAN, JOHN A	5	R01 GM20195-25	100,877	0	03-83	BBCA		21100
SCHENKMAN, JOHN B	5	R01 GM26114-05	175,300	0	05-83	ET		11760
SCHENKMAN, JOHN B	2	R01 GM26548-04	107,237	4	08-83	TOX		11760
SCHERAGA, HAROLD A	2	R01 GM14312-28	139,344	4	12-82	BBCB		22500
SCHERAGA, HAROLD A	5	R01 GM24893-13	118,022	3	03-83	BBCB		22500
SCHIFF, JEROME A	2	R01 GM14595-16	154,033	2	11-82	BBCA		22300
SCHILDKRAUT, CARL L	2	R01 GM22332-06A1	160,132	4	11-82	MBY		21200
SCHIMKE, ROBERT T	2	R01 CA GM14931-16	163,987	4	11-82	BIO		21600
SCHIMMEL, PAUL R	5	R01 GM23562-06	80,153	0	02-83	GEN		21320

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
SCHIMMEL, PAUL R	5	R01 GM15539-15	151,754	1	05-83	BBCA		21320
SCHINDLER, MELVIN S	1	R01 GM30158-01	79,172	2	12-82	BBCA		22300
SCHINDLER, MELVIN S	1	R01 GM31707-01	70,490	2	07-83	MBC		22300
SCHIRCH, LAVERNE G	5	R01 GM28143-03	70,114	0	06-83	PB		22400
SCHLEIF, ROBERT F	5	R01 GM18277-12	120,694	1	04-83	MBC		21750
SCHLESINGER, MILTON J	5	R01 GM28303-03	97,038	0	06-83	MBY		21750
SCHLESSINGER, DAVID	5	R01 GM21357-08	112,635	3	11-82	MBY		21320
SCHLESSINGER, RICHARD H	9	R01 GM31256-06 CA	141,946	2	03-83	MCHA		11910
SCHLIWA, MANFRED	1	R01 GM31041-01	90,760	2	06-83	CBY		22250
SCHMICKEL, ROY	*5	P50 GM20138-09	855,548	1	04-83	SSS		21911
SCHMID, CARL W, JR	5	R01 GM21346-09	77,484	3	08-83	MBY		21600
SCHMID, KARL	5	R01 GM10374-20	153,176	0	11-82	PC		22410
SCHMIDT, FRANCIS J	5	R01 GM26756-03	44,794	0	03-83	MBC		21750
SCHMIDT, PAUL G	5	R01 GM25261-04	37,005	0	03-83	BBCB		21320
SCHMIDT, PAUL G	2	R01 GM25703-04	60,908	2	11-82	BBCB		22500
SCHMIDT, ROBERT R	7	R01 GM29733-01	78,229	0	12-82	MBY		21700
SCHNAITMAN, CARL A	5	R01 GM18006-11	78,588	2	03-83	MBY		22300
SCHNEIDER, DONALD L	5	R01 GM24459-05	43,998	0	06-83	BIO		22300
SCHOENBERG, DANIEL R	1	R01 GM30270-01A1	42,038	2	06-83	BCE		21750
SCHORE, NEIL E	5	R01 GM26294-03	47,807	0	03-83	BMT		11940
SCHOTT, HANS	5	R01 GM27802-03	39,528	0	05-83	PHRA		11850
SCHOWEN, RICHARD L	2	R01 GM20198-09	116,275	2	06-83	BIO	1	11920
SCHOWEN, RICHARD L	2	R01 GM20199-07	86,393	2	11-82	PB		11920
SCHRAMM, VERN L	5	R01 GM21083-07	55,584	0	01-83	BIO		22400
SCHREIBER, STUART L	1	R01 GM30738-01	106,315	2	04-83	MCHA		11940

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
SCHUERCH, CONRAD	5	R01 GM06168-23	69,649	0	06-83	MCHA		11940
SCHULMAN, HOWARD	1	R01 GM30179-01	103,170	2	01-83	PC		22400
SCHULTZ, ARTHUR G	5	R01 GM26568-05	108,243	1	08-83	MCHA		11910
SCHUMAKER, VERNE N	5	R01 GM13914-18	119,878	3	08-83	BBCB		22500
SCHURR, J MICHAEL	5	R01 GM29338-02	69,633	1	06-83	BBCA		21100
SCHUSTER, GARY B	5	R01 GM28190-03	43,076	0	06-83	BBCA		22500
SCHWAB, JOHN M	5	R01 GM26074-03	50,487	0	11-82	MCHA		11920
SCHWAB, JOHN M	5	R01 GM27610-03	72,518	0	11-82	MCHA		11920
SCHWARTZ, IRA S	2	R01 GM29265-02A1	110,869	2	07-83	PC		21320
SCHWARTZBACH, STEVEN D	5	R01 GM26994-03	45,707	0	01-83	BIO		21280
SCHWEIZER, EDWARD E	5	R01 GM27620-03	54,874	1	05-83	MCHA		11930
SCHWEIZER, MARTIN P	2	R01 GM25512-04A1	88,166	2	06-83	BBCA		21320
SCOCCA, JOHN J	5	R01 GM21890-06	103,019	0	03-83	MBC		21200
SCOTT, A IAN	7	R01 GM31600-01	63,358	3	03-83	BNP		11910
SCOTT, ALAN F	5	R01 GM28931-02	111,454	1	03-83	MGN		21480
SCOTT, JOHN F	7	R01 GM30602-01	87,561	0	07-83	MBY		21200
SCOTT, ROBERT A	1	R01 GM30975-01	65,435	2	06-83	PB		22450
SEALE, RONALD L	5	R01 GM27950-03	167,703	1	02-83	CTY		21600
SEALY, ROGER C	5	R01 GM29035-02	52,230	1	03-83	PB		11920
SEDAT, JOHN W	5	R01 GM25101-05	78,376	1	03-83	CTY		21600
SEEGMILLER, JARVIS E	*5	P50 GM17702-12	561,966	3	11-82	SRC		21916
SEEMAN, NADRIAN C	1	R01 GM29554-01	66,808	2	07-83	PC		21200
SEGAL, GERALD A	1	R01 GM30114-01	54,546	2	03-83	BBCA		22500
SEGEL, IRWIN H	5	R01 GM26728-03	70,517	0	10-82	BIO		22400
SELTZER, STANLEY	5	R01 GM27636-03	58,904	0	09-83	BIO		22400

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG SUB	PROGRAM (FINE CODE)
SEMMELHACK, MARTIN F	9	R01 GM31352-04 AI	124,515	2	03-83	MCHA	11910
SENIOR, ALAN E	5	R01 GM25349-05	139,341	3	08-83	PB	22450
SENIOR, ALAN E	1	R01 GM29805-01	71,707	2	06-83	PB	22450
SERWER, PHILIP	5	R01 GM24365-06	73,651	0	06-83	MG	21320
SETLOW, PETER	5	R01 GM19698-11	139,476	1	08-83	MBC	22200
SEYBERT, DAVID W	5	R01 GM28547-02	61,660	1	11-82	PB	22400
SHAPIRO, BENNETT M	5	R01 GM23910-06	113,875	2	07-83	CBY	22200
SHAPIRO, BERNARD H	5	R01 GM26222-03	94,364	0	03-83	PHRA	11880
SHAPIRO, JAMES A	5	R01 GM24960-05	180,237	3	12-82	MG	21780
SHAPIRO, LUCILLE	5	P01 GM11301-20	867,943	2	05-83	SSS	21700
SHAPIRO, ROBERT	5	R01 GM20176-10	78,225	0	08-83	BIO	21250
SHARPLESS, K BARRY	1	R01 GM31124-01	132,761	2	07-83	BNP	11940
SHARPLESS, K BARRY	5	R01 GM28384-02	129,835	2	12-82	BMT	11940
SHAW, BARBARA R	5	R01 GM23681-06	59,406	1	12-82	PBC	21600
SHAY, JERRY W	5	R01 GM29261-03	43,283	0	08-83	CBY	22250
SHEA, KENNETH J	5	R01 GM22995-06	51,176	0	05-83	MCHA	11940
SHEINER, LEWIS B	2	R01 GM26676-04	146,661	4	08-83	PHRA	11350
SHERLINE, PETER	2	R01 GM22497-07	96,733	2	08-83	CBY	22250
SHERMAN, FRED	5	R01 GM12702-18	242,644	1	12-82	GEN	21750
SHERMAN, LOUIS A	5	R01 GM21827-08	92,912	1	04-83	MBC	22450
SHETLAR, MARTIN D	5	R01 GM23526-06	66,666	1	03-83	RAD	21600
SHIMIZU, NOBUYOSHI	5	R01 GM24375-06	100,007	2	06-83	MGN	22200
SHIMIZU, YUZURU	2	R01 GM24425-04	75,048	2	06-83	BNP	11910
SHIMIZU, YUZURU	5	R01 GM28754-09	82,260	0	08-83	MCHA	11910
SHINE, JOHN	5	R01 GM28027-02	57,322	1	11-82	MBC	21600

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
SHINER, CHRISTOPHER S	1	R01 GM31215-01	60,511	2	08-83	MCHA		21100
SHIRES, G THOMAS	*5	P50 GM26145-04	363,807	1	03-83	SRC		13300
SHIRES, GEORGE T	5	R01 GM23000-07	119,333	3	06-83	SAT		13420
SHIVELY, JOHN E	5	R01 GM29007-02	112,974	1	08-83	PBC		22500
SHORTLE, DAVID R	1	R01 GM30649-01	78,527	2	04-83	MG		21250
SHOWS, THOMAS B	5	R01 GM20454-10	226,490	3	07-83	MGN		21480
SHRAGO, EARL S	5	R01 GM14033-16	72,144	2	12-82	PC		22400
SHULMAN, ROBERT G	1	P01 GM30287-01 NS	746,022	2	01-83	SSS		12840
SIEGEL, ALBERT	5	R01 GM27064-03	71,132	0	12-82	VR		21280
SIEGEL, ELI C	5	R01 GM25921-03	69,424	0	12-82	MBC		21250
SIGLER, PAUL B	5	R01 GM15225-14	136,052	0	08-83	BBCA		21320
SIGLER, PAUL B	5	R01 GM25234-06	76,709	0	08-83	BBCB		22550
SIGMAN, DAVID S	5	R01 GM21199-14	85,438	2	11-82	BIO		22400
SIGNER, ETHAN R	1	R01 GM31030-01	105,484	2	06-83	GEN		21780
SIH, CHARLES J	5	R01 GM26838-03	75,362	1	12-82	MCHA		11920
SIIMAN, OLAVI	1	R01 GM30904-01	51,780	2	06-83	BMT		22500
SIKOV, MELVIN R	5	R01 GM20661-09	170,628	1	03-83	RNM		12910
SILBERT, DAVID F	1	R01 GM30244-01	136,324	3	01-83	CTY		22300
SILFLOW, CAROLYN D	1	R01 GM31159-01	79,601	2	06-83	MBY		21750
SILVER, FREDERICK H	7	R01 GM30425-01	33,760	0	02-83	PBC		22500
SILVERMAN, DAVID N	5	R01 GM25154-05	102,109	1	03-83	PB		22400
SILVERMAN, PHILIP	1	R01 GM30549-01 AI	116,318	2	04-83	MG		22400
SILVERSTEIN, EMANUEL	5	R01 GM18453-08	76,747	0	11-82	BIO		22400
SILVERSTEIN, SAMUEL C	1	R13 GM30792-01	3,000	0	05-83	CBY		22300
SIMON, LEE D	5	R01 GM27314-03 GM	103,800	1	11-82	GEN		21280

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
SIMON, MELVIN I	5	R01 GM29797-02	192,629	1	02-83	GEN		21480
SIMONI, ROBERT D	5	R01 GM18539-12	126,439	1	07-83	MBC		22300
SIMPSON, MELVIN V	2	R01 GM22333-16	89,430	2	06-83	BIO		21280
SINGER, BRITTA S	5	R01 GM28634-02	80,126	1	01-83	GEN		21250
SINGER, S JONATHAN	5	R01 GM15971-15	181,119	3	04-83	CTY		22300
SINHA, NAVIN K	5	R01 GM24391-06	85,037	0	07-83	MG		21200
SKLAR, JEFFREY L	1	R01 GM31218-01	89,582	2	06-83	MBY		21750
SLAYMAN, CAROLYN W	5	R01 GM15761-14	112,798	1	03-83	GEN		22300
SLAYMAN, CLIFFORD L, JR	5	R01 GM15858-15	165,461	3	04-83	PHY		22300
SLAYTER, HENRY S	5	R01 GM14237-15	92,224	1	03-83	CBY		12930
SLIGAR, STEPHEN G	7	R01 GM31756-01	114,616	3	07-83	PB		22450
SLOBIN, LAWRENCE I	2	R01 GM25434-04A1	82,955	4	06-83	PC		21320
SLUDER, GREENFIELD	1	R01 GM30758-01	99,831	2	04-83	MBY		22200
SLY, WILLIAM S	5	P01 CA GM21096-08	478,952	0	05-83	SSS		21400
SMALL, ENOCH W	2	R01 GM25663-04	72,768	2	11-82	BBCA		21600
SMALL, GARY D	5	R01 GM21095-08	41,254	0	06-83	PC		21250
SMITH, AMOS B, III	5	R01 GM29028-02	88,469	1	03-83	MCHA		11910
SMITH, DAVID S	5	R23 GM29664-02	55,729	1	06-83	SAT		13250
SMITH, GERALD R	7	R01 GM31693-01	28,756	2	12-82	VR		21200
SMITH, ISSAR	5	R01 GM28407-11	87,643	0	06-83	MBC		21750
SMITH, ISSAR	5	R01 GM19693-09	96,863	1	05-83	MBC		21320
SMITH, JERRY C	1	R01 GM30552-01	66,558	2	04-83	PB		22450
SMITH, MALCOLM M	5	R01 GM28920-02	60,278	1	03-83	GEN		21750
SMITH, PHILLIP R	2	R01 GM26723-04	136,894	4	06-83	BBCB		12930
SMITH, THOMAS E	5	R01 GM28373-03	112,733	3	03-83	BIO		22400

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
SMITHIES, OLIVER	5	R01 GM20069-10	238,519	0	12-82	GEN		21750
SMOUSE, PETER E	1	R01 GM30135-01	70,146	1	02-83	MGN		21400
SNELL, WILLIAM J	5	R01 GM25661-05	74,897	2	06-83	CBY		22300
SNIDER, BARRY B	5	R01 GM30354-02	80,269	1	08-83	MCHA		11910
SNIDER, BARRY B	2	R01 GM30528-02	101,198	2	02-83	MCHA		11940
SNUSTAD, D PETER	2	R01 GM25417-04	84,499	2	03-83	MG		21750
SNYDER, GRAYSON H	2	R01 AI GM26715-04	85,733	2	06-83	BBCA		22500
SNYDER, LOREN R	5	R01 GM28001-03	94,242	0	07-83	MG		21280
SOBELL, HENRY M	5	R01 GM30032-02	223,397	1	07-83	SSS		21100
SOBERMAN, ROY J	1	R01 GM31193-01	59,855	2	06-83	BIO	2	22400
SOFER, WILLIAM H	2	R01 GM28791-03	107,164	4	06-83	GEN		21750
SOGIN, MITCHELL L	5	R01 GM23464-06	83,537	0	01-83	PC		21750
SOKAL, ROBERT R	5	R01 GM28262-03	66,758	0	06-83	GEN		21400
SOKATCH, JOHN R	1	R01 GM30428-01	71,528	2	06-83	SSS		22400
SOLL, DAVID R	2	R01 AI GM25832-04	96,026	3	08-83	CTY		22200
SOLL, DIETER G	5	R01 GM22854-07	314,838	3	02-83	BIO		21320
SOLLNER-WEBB, BARBARA T	5	R01 GM27720-03	63,552	0	03-83	MBY		21310
SOLOMON, FRANK E	5	R01 GM27894-03	101,379	0	03-83	CBY		22250
SOMERVILLE, RONALD L	2	R01 GM22131-08	122,806	2	06-83	MBC		21750
SONENBERG, MARTIN	5	R01 GM27612-07	109,582	0	06-83	SSS		22300
SONENSHEIN, ABRAHAM L	1	R01 GM30408-01	83,835	2	04-83	MG		21310
SONENSHEIN, ABRAHAM L	5	R01 AI GM19168-11	82,745	2	01-83	MBC		21750
SORRELL, THOMAS N	5	R01 GM28375-02	46,177	1	01-83	BMT		11920
SOUTHERLAND, WILLIAM M	5	R01 GM27975-03	65,898	0	06-83	BIO		22400
SPATH, JAMES A, JR	1	R01 GM30473-01	97,289	2	04-83	SAT		13410

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
SPEEG, KERMIT V	7	R01 GM31780-01	79,102	1	01-83	PHRA		11890
SPENCE, JACK T	5	R01 GM08347-22	57,645	1	04-83	BMT		11920
SPICER, ELEANOR K	1	R01 GM30191-01	71,890	2	03-83	MG		21200
SPIRO, THOMAS G	5	R01 GM13498-17	105,924	2	07-83	BBCB		11920
SPIRO, THOMAS G	2	R01 GM25158-04A1	98,542	2	03-83	BBCB		22500
SPITZER, JUDY A	1	R01 GM30312-01	76,263	4	12-82	SAT		13420
SPIVEY, HOWARD O	5	R01 GM16916-09	46,381	0	03-83	PC		22400
SPRADLING, ALLAN C	5	R01 GM27875-03	91,283	0	03-83	GEN		21700
SPRAGUE, GEORGE F, JR	1	R01 GM30027-01	99,507	2	01-83	GEN		21750
SPRAGUE, KAREN U	5	R01 GM25388-05	114,342	3	07-83	GEN		21750
SPREMULLI, LINDA L	5	R01 GM24963-05	76,150	3	03-83	PC		21320
SPUDICH, JAMES A	1	P01 GM30387-01	426,530	3	06-83	SSS		22300
SPUDICH, JAMES A	5	R01 GM25240-06	143,363	3	08-83	CTY		22250
SPUDICH, JAMES A	5	R01 GM27510-03	104,071	0	11-82	CBY		22250
SPUDICH, JOHN L	5	R01 GM27750-03	84,404	0	03-83	MBC		22450
SQUIRES, CATHERINE L	5	R01 GM24751-06	99,034	1	03-83	MBC		21750
SQUIRES, CATHERINE L	5	R01 GM25178-05	146,086	3	03-83	MG		21600
SRB, ADRIAN M	5	R01 GM12953-32	55,167	0	11-82	GEN		21700
SRIDHARA, S	7	R01 GM32092-01	47,317	1	06-83	GEN		21700
STADLER; JOAN K	5	R01 GM25728-04	62,304	1	11-82	MGN		22300
STAEHELIN, L ANDREW	5	R01 GM22912-06	74,584	2	06-83	CTY		22300
STAEHELIN, L ANDREW	2	R01 GM18639-11	128,951	4	03-83	CTY		12930
STAHL, FRANKLIN W	5	R01 GM20373-08	71,397	0	06-83	VR		21200
STAHL, FRANKLIN W	5	R01 GM28369-02	78,074	1	01-83	GEN		21200
STALLCUP, MICHAEL R	5	R01 GM28298-03	74,777	0	06-83	MBY		21750

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
STAMBROOK, PETER J	7	R01 GM29463-01	93,034	0	12-82	GEN		21200
STANDING, KENNETH G	1	R01 GM30605-01	59,068	2	05-83	SSS		12840
STANKOVICH, MARIAN T	5	R01 GM29344-02	56,112	1	06-83	PB		22450
STANSKI, DONALD R	5	R23 GM28032-03	38,571	0	06-83	SAT		13250
STAPLETON, HARVEY J	5	R01 GM24488-03	55,799	0	04-83	BMT		22500
STARCHER, BARRY C	1	R01 GM30416-01	81,904	2	04-83	PBC		22400
STARZAK, MICHAEL E	5	R01 GM11762-17	51,733	0	12-82	BBCB		22500
STAUFFER, GEORGE V	2	R01 GM26878-04	92,051	2	06-83	MG		21750
STEGGLES, ALAN W	1	R01 AI GM27675-01A1	58,100	2	01-83	BIO		11760
STEIN, ARNOLD	5	R01 AM GM27719-03	92,190	0	04-83	MBY		21600
STEINMAN, HOWARD M	5	R01 GM24527-06	126,277	0	04-83	BIO		22500
STEITZ, JOAN A	5	R01 GM26154-12	174,266	1	04-83	MBC		21750
STELLWAGEN, EARLE C	2	R01 GM22109-07	92,805	4	03-83	BBCA		22500
STELLWAGEN, EARLE C	5	R01 GM13215-17	50,494	0	11-83	BBCB		22500
STELLWAGEN, NANCY C	5	R01 GM29690-02	63,294	1	06-83	BBCA		21100
STEPHENS, PHILIP J	5	R01 GM28386-02	78,549	3	01-83	BBCA		22500
STEPHENS, RAYMOND E	5	R01 GM20644-10	123,908	0	08-83	MBY		22250
STEPHENS, RAYMOND E	5	R01 GM29503-02	83,952	1	06-83	CBY		22250
STERNBACH, DANIEL D	1	R01 GM30343-01	86,098	2	01-83	MCHA		11910
STERNGLANZ, ROLF	5	R01 CA GM28220-03	61,222	0	06-83	MG		21200
STEVENS, EUGENE S	2	R01 GM24862-04	57,916	2	03-83	BBCA		22410
STEVENS, EUGENE S	3	R01 GM24862-04S1	40,200	0	03-83	SSS		22410
STEVENS, ROBERT V	5	R01 GM28122-03	97,205	0	06-83	MCHA		11910
STEVENSON, ROBERT	5	R01 GM19566-12	80,820	0	11-82	MCHA		11910
STEWART, CHARLES R	5	R01 GM28488-02	85,855	1	12-82	MG		21200

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
STILES, JOHN I	5	R01 GM29011-02	43,358	1	03-83	GEN		21600
STILLER, RICHARD L	5	R01 GM27340-03	104,428	0	11-82	SGYA		13200
STOECKENIUS, WALTHER	5	P01 GM27057-03	643,111	2	05-83	SSS		22300
STORK, GILBERT	5	R01 GM05147-26	219,278	2	08-83	MCHA		11910
STORM, DANIEL R	1	R01 GM31708-01	89,332	2	08-83	MBC		22400
STORRIE, BRIAN	5	R01 GM28188-03	60,563	0	07-83	CBY		22300
STORTI, ROBERT V	1	R01 GM30181-01	48,207	2	01-83	GEN		21750
STORTI, ROBERT V	2	R01 GM27611-04	113,286	2	07-83	GEN		21600
STOUT, CHARLES D	5	R01 GM25672-05	106,667	3	07-83	BBCB		22550
STRAUSBAUGH, LINDA D	5	R01 GM28680-02	77,612	1	01-83	GEN		21750
STRAUSS, BERNARD S	5	R01 GM07816-23	126,997	1	11-82	GEN		21250
STRAUSS, HERBERT L	5	R01 GM27690-03	73,731	0	03-83	BBCB		22300
STREISINGER, GEORGE	2	R01 GM22731-07	205,479	4	02-83	GEN		21700
STREITWIESER, ANDREW	1	R01 GM30369-01	74,021	2	04-83	MCHA		11940
STREKAS, THOMAS C	5	R01 GM27065-03	65,410	0	11-82	BMT		22450
STRICHARTZ, GARY R	1	R01 GM30160-01 NS	159,803	2	01-83	SAT		13200
STRIKER, GARY E	1	P01 GM29853-01	450,570	4	01-83	SRC		13300
STRITTMATTER, PHILIPP	5	R01 GM15924-15	198,975	0	05-83	PC		22300
STROBEL, EDWARD	5	R01 GM29097-02	64,389	1	03-83	GEN		21600
STROUD, ROBERT M	5	R01 GM24485-06	111,491	1	03-83	BBCB		22550
STRUHL, KEVIN	1	R01 GM30186-01	118,184	2	02-83	GEN		21750
STRYER, LUBERT	2	R01 GM24032-06	113,710	4	03-83	SSS		12840
STUBBE, JOANNE	5	R01 GM29595-03	78,725	0	06-83	PB		22400
STUBBS, GERALD J	5	R01 GM25236-05	116,473	1	03-83	BBCB		21320
STUDIER, F WILLIAM	5	R01 GM21872-08	80,806	0	01-83	VR		21200

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
STUEHR, JOHN E	2	R01 GM13116-17	94,684	3	03-83	BIO		22400
STUMPF, PAUL K	5	R01 GM29415-02	79,169	0	08-83	PC		22400
STURMAN, LAWRENCE S	1	R01 GM31698-01	93,764	2	06-83	EVR		22410
STURTEVANT, JULIAN M	5	R01 GM04725-26	93,817	0	11-82	BBCB		22500
SUAREZ, BRIAN K	5	R01 GM28067-02	87,369	0	06-83	MGN		21400
SUBRAMANI, SURESH	1	R01 GM31253-01	82,837	2	06-83	EVR		21200
SUDDATH, FRED L, JR	1	R01 GM30551-01	39,586	2	04-83	BBCB		22550
SUDMEIER, JAMES L	5	R01 GM25877-04	61,224	1	03-83	BMT		22500
SUELTER, CLARENCE H	5	R01 GM20716-09	63,725	1	05-83	BIO		22400
SUEOKA, NOBORU	5	R01 GM22951-07	125,053	0	06-83	CTY		21750
SUEOKA, NOBORU	5	R01 GM28133-03	67,358	1	06-83	MG		21200
SUGERMAN, HARVEY J	5	R23 GM27245-03	45,373	0	12-82	SB		13450
SUHADOLNIK, ROBERT J	5	R01 GM26134-09	107,468	1	05-83	PC		22400
SUKENIK, CHAIM N	5	R01 GM27355-03	74,594	0	05-83	MCHA		11920
SULZMAN, FRANK M	5	R01 GM28265-03	48,637	0	06-83	BPO		13700
SUMMERS, ANNE O	5	R01 GM28211-03	71,680	0	11-82	MBC		21280
SUNDARALINGAM, MUTTAIYA	5	R01 GM17378-13	69,823	3	02-83	BBCA		21100
SUNDARALINGAM, MUTTAIYA	2	R01 GM18455-09	79,677	2	06-83	BBCA		21100
SUNG, MICHAEL T	2	R01 GM27053-04A1 HL	86,101	2	03-83	MBY		21600
SURZYCKI, STEFAN J	5	R01 GM22968-07	68,557	0	07-83	GEN		21280
SUSSKIND, MIRIAM M	2	R01 GM22877-07	124,823	4	03-83	MG		21750
SUSSKIND, MIRIAM M	5	R01 GM29049-02	96,364	2	03-83	MG		21750
SUSSMAN, MAURICE	1	R01 GM29776-01	91,144	2	01-83	MBC		22200
SWANSON, CURTIS J	5	R01 GM28213-03	19,175	0	06-83	RNM		12400
SWEENEY, WILLIAM V	5	R01 GM27382-03	49,600	0	11-82	BMT		22450

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
SWEET, ROBERT M	5	R01 GM27076-03	64,544	0	12-82	BBCB		22550
SYPHERD, PAUL S	5	R01 GM23999-06	99,218	2	06-83	MBC		21320
SYPHERD, PAUL S	5	R01 GM26690-04	96,223	0	07-83	GEN		21320
SYVANEN, MICHAEL	5	R01 GM28142-03	148,081	1	06-83	MG		21780
SZABO, GABOR	5	R01 GM26897-03	46,587	0	07-83	BBCB		22300
SZER, WLODZIMIERZ	5	R01 GM23705-10	111,712	3	05-83	MBY		21320
SZOKA, FRANCIS C	1	R01 GM30163-01	121,778	2	01-83	PHRA		11850
SZOKA, FRANCIS C, JR	5	R01 GM29514-02	63,049	1	03-83	CP		22300
SZOSTAK, JACK W	5	R01 GM27862-03	82,197	0	03-83	GEN		21200
TABITA, FRED R	2	R01 GM24497-05	92,529	4	12-82	BIO		22400
TAFT, ROBERT W	5	R01 GM14078-16	60,745	0	11-82	BBCB		22500
TAI, HSIN-HSIUNG	5	R01 GM30380-02	55,048	0	08-83	BIO		22400
TAI, HSIN-HSIUNG	1	R01 GM31454-01	34,555	1	04-83	BIO		22400
TAI, PHANG-CHENG	5	R01 GM22030-07	76,019	1	06-83	MBC		21320
TAI, PHANG-CHENG	5	R01 GM28927-03	72,951	1	08-83	MBC		21320
TAKAHASHI, MARK T	5	R01 GM18628-12	91,670	0	08-83	BMT		22400
TAKEDA, YOSHINORI	1	R01 GM30894-01	68,548	2	06-83	MG		21100
TAKEDA, YOSHINORI	5	R01 GM28138-03	80,638	0	06-83	MG		21750
TAMM, SIDNEY L	5	R01 GM27903-03	106,468	2	04-83	CBY		22250
TANABE, MASATO	5	R01 GM27058-03	89,694	0	02-83	SSS		11910
TANG, JORDAN J	5	R01 GM20212-07	58,405	0	11-82	PC		22500
TARTOF, KENNETH D	5	R01 GM19194-11	166,795	2	04-83	GEN		21600
TASH, JOSEPH S	1	R01 GM29496-01A1 HD	100,446	2	06-83	CTY		22250

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
TASHIAN, RICHARD E	5	R01 GM24681-05	212,028	0	11-82	GEN		21800
TATCHELL, KELLY G	5	R01 GM29473-02	105,528	1	06-83	GEN		21700
TAUBE, HENRY	5	R01 GM13638-17	115,915	1	03-83	BMT		11920
TAYLOR, BARRIE F	5	R01 GM20172-08	98,015	0	06-83	MBC		22400
TAYLOR, BARRY L	5	R01 GM29481-02	85,852	1	08-83	MBC		22200
TAYLOR, BENJAMIN A	2	R01 GM18684-11	164,907	4	06-83	MGN		21480
TAYLOR, EDWARD C	5	R01 GM27983-03	76,811	0	08-83	MCHA		11940
TAYLOR, KENNETH A	1	R01 GM30598-01	86,568	2	04-83	BBCB		22250
TAYLOR, LARRY T	5	R01 GM21844-06	45,751	0	03-83	BMT		11920
TAYLOR, PALMER W	5	R01 GM24337-06	70,856	2	06-83	NLS		11870
TAYLOR, PALMER W	5	R01 GM18360-11	103,201	2	12-82	NLS		11870
TAYLOR, SUSAN S	5	R01 GM19301-11	134,545	3	04-83	PB		22500
TEDESCHI, HENRY	5	R01 GM27043-03	65,983	1	12-82	BIO		22450
TEETER, MARTHA M	1	R01 GM30165-01A1	86,716	2	06-83	BBCB		22550
TELLER, DAVID C	5	R01 GM13401-17	75,475	0	12-82	BBCA		22500
TELZER, BRUCE R	1	R01 GM31003-01	81,633	2	06-83	CBY		22250
TEMPLETON, ALAN R	5	R01 GM27021-03	50,003	0	06-83	GEN		21800
TEPHLY, THOMAS R	*5	P50 GM12675-[illegible]	740,020	1	11-82	PTR		11300
TEPHLY, THOMAS R	*3	P50 GM12675-18S1	102,371	1	11-82	PTR		11300
TEPHLY, THOMAS R	5	R01 GM26221-03	61,752	0	03-83	PHRA		11760
TEPHLY, THOMAS R	2	R01 GM19420-11	121,462	4	11-82	TOX		11790
TESSMAN, ETHEL S	1	R01 GM30435-01	93,884	2	07-83	MG		21200
THOMAS, CHARLES A, JR	5	R01 GM30338-02	143,424	0	01-83	GEN		21600
THOMAS, DAVID D	5	R01 GM27906-03	54,298	0	03-83	BBCB		22300
THOMAS, JOHN O	5	R01 GM28747-02	66,302	1	11-82	PC		21600

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG SUB	PROGRAM (FINE CODE)
THOMAS, MICHAEL J	1	R01 GM29611-01 AI	54,424	2	03-83	BBCA	11920
THOMPSON, ROBERT C	2	R01 GM24983-04	97,079	4	04-83	PC	21320
THOMPSON, STEPHEN M	1	R01 GM31191-01	59,800	2	06-83	PHY	22300
THOMPSON, THOMAS E	5	R01 GM23573-05 AM	56,862	1	12-82	SSS	22300
THOMPSON, THOMAS E	2	R01 GM14628-17	107,877	4	04-83	BBCB	22300
THOMPSON, W JOSEPH	5	R01 GM21361-09	130,308	1	06-83	BIO	22400
THORNER, JEREMY W	5	R01 GM21841-08	111,393	1	12-82	GEN	22200
THORPE, COLIN	2	R01 GM26643-04	85,396	4	06-83	PB	22400
THROCKMORTON, LYNN H	5	R01 GM23007-05	132,812	0	03-83	GEN	21800
THROCKMORTON, LYNN H	3	R01 GM23007-05S1	12,216	0	03-83	GEN	21800
TIEN, H TI	5	R01 GM14971-17	126,175	1	08-83	BBCB	22300
TILLACK, THOMAS W	5	R01 GM26234-03	63,075	0	11-82	CTY	22300
TIMASHEFF, SERGE N	2	R01 GM14603-16	84,310	4	11-82	BBCA	22500
TIMBERLAKE, WILLIAM E	2	R01 GM30349-02	119,048	2	07-83	GEN	21700
TIMKOVICH, RUSSELL	5	R01 GM23869-06	77,392	1	03-83	BIO	22450
TINKER, JOHN H	5	R01 GM24531-05	118,023	1	12-82	SAT	13200
TINOCO, IGNACIO, JR	5	R01 GM10840-24	164,448	2	11-82	BBCA	21100
TIUS, MARCUS A	1	R01 GM30390-01	53,857	2	05-83	MCHA	11910
TIVOL, WILLIAM F	5	R01 GM28614-02	49,682	1	02-83	SSS	12930
TOBACK, FREDERICK G	5	R01 GM22328-07	153,294	0	03-83	PTHA	22300
TOBACK, FREDERICK G	3	R01 GM22328-07S1	93,009	0	03-83	PTHA	22300
TOBIN, ELAINE M	2	R01 GM23167-07	118,285	4	07-83	CTY	21700
TOMPKINS, LAURIE	5	R01 GM28998-02	52,873	1	03-83	GEN	21800
TOPAL, MICHAEL D	2	R01 GM24798-04	87,613	4	03-83	CPA	21250
TOPICH, JOSEPH A	1	R01 GM28659-01A1	47,664	2	08-83	BMT	21100

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
TORGERSON, WARREN S	1	R01 GM29772-01A1	93,003	2	03-83	SSS		13700
TORRIANI-GORINI, ANNAMARIA	5	R01 GM24009-05	109,711	3	03-83	MBC		21750
TORRIANI-GORINI, ANNAMARIA	5	R01 GM25854-03	64,602	0	11-82	MBC		21750
TOSCANO, WILLIAM A, JR	5	R01 GM28897-02	126,312	1	03-83	CTY		22300
TOSTESON, DANIEL C	5	R01 GM25277-05	140,876	2	06-83	PHY		22300
TOSTESON, DANIEL C	5	R01 GM25686-05	153,053	0	06-83	PHY		22300
TOUSTER, OSCAR	5	R01 GM26430-18	115,840	2	06-83	CBY		22400
TOZER, THOMAS N	2	R01 GM26556-04	106,064	3	03-83	PHRA		11780
TRAGER, WILLIAM F	5	R01 GM25136-05	71,371	1	03-83	PHRA		11760
TRAUGH, JOLINDA A	5	R01 GM21424-08	83,995	0	06-83	MBY		21320
TRAUGH, JOLINDA A	2	R01 GM26738-04	77,190	2	06-83	MBY		22400
TRAUT, ROBERT R	5	R01 GM17924-12	136,097	1	04-83	PC		21320
TRIMBLE, ROBERT B	5	R01 GM23900-05	44,811	0	08-83	PC		22410
TROST, BARRY M	5	R01 GM13598-17	118,318	0	05-83	MCHA		11940
TRUE, NANCY S	1	R01 GM29985-01	35,134	2	01-83	BBCA		22500
TRUMPOWER, BERNARD L	5	R01 GM20379-09	89,798	2	11-82	BIO		22450
TRUMPOWER, BERNARD L	3	R01 GM20379-09S1	22,523	2	11-82	BIO		22450
TRUNKEY, DONALD D	5	R01 GM25078-05	92,033	0	03-83	SGYA		13420
TRUNKEY, DONALD D	*5	P50 GM18470-11	410,214	0	06-83	SRC		13300
TS'O, PAUL O	5	R01 GM16066-15	191,386	0	06-83	SSS		21100
TSAI, CHUN-CHE	5	R01 GM31257-02	56,520	1	12-82	BBCA		11920
TSAI, MING-DAW	2	R01 GM30327-02	67,593	2	06-83	PB		22400
TSAI, MING-DAW	1	R01 GM29041-01A1	67,282	2	07-83	BMT		22500
TSENG, BEN Y	5	R01 GM29091-02	83,955	1	05-83	MBY		21200
TSERNOGLOU, DEMETRIUS	5	R01 GM29791-09	74,064	1	01-83	BBCB		22550

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
TSIEN, ROGER Y	1	R01 GM31004-01	100,043	2	06-83	CP		22200
TSONG, TIAN Y	5	R01 GM28795-08 CA	107,081	3	04-83	BBCB		22300
TU, ANTHONY T	2	R01 GM15591-15	74,221	4	05-83	TOX		11790
TU, ANTHONY T	5	R01 GM19172-11	64,943	0	08-83	TOX		11790
TU, SHIAO-CHUN	2	R01 GM25953-04	89,436	2	03-83	PB		11760
TUFARIELLO, JOSEPH J	5	R01 GM25303-05 ES	112,377	1	08-83	MCHA		11910
TULINSKY, ALEXANDER	2	R01 GM21225-07	182,590	2	11-82	BBCB		22550
TULINSKY, ALEXANDER	2	R01 GM26360-04	144,998	2	04-83	BBCB		22550
TURINSKY, JIRI	5	R01 GM22825-06	64,535	0	02-83	MET		13420
TURNBOUGH, CHARLES L, JR	5	R01 GM29466-02	68,265	1	07-83	MG		21750
TURNBULL, BRUCE W	5	R01 GM28364-02	43,364	1	01-83	SSS		12100
TURNER, DOUGLAS H	2	R01 GM22939-07	165,492	4	02-83	BBCA		21100
TURNER, DOUGLAS H	5	R01 GM28533-02	40,446	1	11-82	BBCA		21100
TURNER, DOUGLAS H	5	R01 GM29374-02	29,574	1	06-83	BBCA		21100
TYE, BIK-KWOON	5	R01 GM26941-03	63,287	0	04-83	GEN		21480
TYSON, CHARLES A	5	R01 GM28158-03	110,724	0	08-83	PHRA		11860
TYSON, JOHN J	5	R01 GM27629-03	43,285	1	03-83	CBY		22200
TZAGOLOFF, ALEXANDER A	5	R01 GM25250-06	60,215	0	08-83	BIO		22450
UEDA, ISSAKU	2	R01 GM26950-04	69,053	2	06-83	SAT		13200
UEDA, ISSAKU	5	R01 GM27670-03	54,701	0	03-83	SAT		13200
UHLENBECK, OLKE C	1	R01 GM30418-01	73,313	2	04-83	BBCA		21320
UHLENBECK, OLKE C	5	R01 GM19059-11	102,215	0	12-82	BBCA		21100
UITTO, JOUNI J	5	R01 GM28833-03	88,553	0	07-83	GMA		13420

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
ULEVITCH, RICHARD J	5	R01 GM28485-02	82,193	0	02-83	SAT		13420
UMBARGER, H EDWIN	2	R01 GM12522-18	220,069	4	11-82	MG		21750
UNWIN, NIGEL	5	R01 GM28668-02	33,212	1	11-82	BBCB		22550
UNWIN, PETER N	5	R01 GM27764-03	134,219	2	03-83	MBY		22300
UPDIKE, STUART J	5	R01 GM16133-14	74,067	0	06-83	PBC		12820
URBANIAK, JAMES R	5	R01 GM25666-05	152,211	1	02-83	AFY		13410
URRY, DAN W	5	R01 GM26898-04	105,473	1	06-83	BBCB		22300
USHER, DAVID A	5	R01 GM26249-04	53,639	0	03-83	MCHA		21100
USHER, DAVID C	5	R01 GM27096-03	76,498	0	12-82	MGN		21480
VALENTINE, JOAN S	5	R01 GM28222-03	85,255	1	12-82	BBCA		22500
VALENZUELA, PABLO D	2	R01 GM25157-04	45,557	4	11-82	MBY		21750
VALLEE, BERT L	5	R01 GM24989-05	168,304	0	05-83	BMT		22200
VALLEE, RICHARD B	2	R01 GM26701-04	128,733	2	06-83	CBY		22250
VAN DER HELM, DICK	5	R01 GM21822-08	102,155	2	04-83	BBCA		22550
VAN DER HOEVEN, THEODORE A	5	R01 GM27811-03	54,220	0	08-83	BIO		11880
VAN DUYNE, RICHARD P	5	R01 GM27498-03	61,952	0	11-82	BMT		22450
VAN DYKE, CRAIG	1	R01 GM30544-01 AI	44,754	2	07-83	BPO		13700
VAN DYKE, RUSSELL A	5	R01 GM17158-11	113,076	0	03-83	SAT		13200
VAN ETTEN, ROBERT L	5	R01 GM22933-05	102,010	3	12-82	BIO		22400
VAN ETTEN, ROBERT L	5	R01 GM27003-13	96,878	1	06-83	BIO		22400
VAN HOLDE, KENSAL E	1	R13 GM30433-01	3,000	0	04-83	SSS		21600
VAN HOLDE, KENSAL E	2	R01 GM22916-07 GM	99,104	2	03-83	MBY		21600
VAN HOOK, WILLIAM A	5	R01 GM19991-09	53,900	0	01-83	BBCB		22500

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
VAN RYZIN, JOHN R	5	R01 GM28405-03	76,808	1	03-83	SSS		12100
VAN TAMELEN, EUGENE E	5	R01 GM10421-18	63,434	0	07-83	MCHA		11910
VAN TUYLE, GLENN C	2	R01 GM22597-07	89,837	2	03-83	MBY		21280
VAN WART, HAROLD E	5	R01 GM27276-03	48,552	0	12-82	BMT		22400
VAN WART, HAROLD E	5	R01 GM27939-03	63,594	0	03-83	BMT		22400
VANDEBERG, JOHN L	5	R01 GM29249-03	160,339	0	08-83	MGN		21480
VANDERJAGT, DAVID L	2	R01 GM25295-07	98,186	2	11-82	BIO		22500
VARSHAVSKY, ALEXANDER J	5	R01 GM26086-04	77,969	1	11-82	CBY		21600
VATSIS, KOSTAS P	5	R01 GM28342-03	65,204	0	06-83	PB		11760
VAUGHAN, WORTH E	5	R01 GM27651-03	30,751	0	02-83	BBCA		21100
VESTAL, MARVIN L	2	R01 GM24031-06	102,181	2	11-82	BMT		12840
VESTAL, MARVIN L	5	R01 GM28291-03	45,384	0	08-83	SSS		12840
VESTAL, MARVIN L	5	R01 GM29151-02	63,349	1	03-83	SSS		12840
VILLA-KOMAROFF, LYDIA	2	R01 GM26028-04	113,982	2	11-82	MGN		21600
VILLAFRANCA, JOSEPH J	5	R01 AM GM23529-06	84,218	2	12-82	BMT		22400
VILLAFRANCA, JOSEPH J	5	R01 GM29139-02	105,574	1	03-83	BIO		22400
VILLAREJO, MERNA R	5	R01 GM23189-06	53,528	0	10-82	PBC		22300
VILLEREAL, MITCHEL L	5	R01 GM28359-03	91,099	0	03-83	MBY		22300
VIOLA, RONALD E	1	R01 GM30217-01	63,276	2	03-83	PB		22400
VOELLMY, RICHARD W	1	R01 GM31125-01	131,897	2	06-83	GEN		21750
VOET, DONALD H	2	R01 GM20568-06	106,495	2	03-83	BBCB		22550
VOLCANI, BENJAMIN E	5	R01 GM08229-22	156,255	1	04-83	GMB		22200
VOLD, BARBARA S	5	R01 GM29231-03	161,721	3	08-83	MG		21320
VOLLHARDT, K PETER	2	R01 GM22479-07	88,093	4	03-83	BMT		11940
VON HIPPEL, PETER H	5	R01 GM15792-16	155,923	0	12-82	BBCA		21100

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
VON HIPPEL, PETER H	5	R01 GM29158-02	97,223	3	03-83	MG		21100
VON RAMM, OLAF T	5	R01 GM29680-02	135,071	1	06-83	SSS		12910
VONDER HAAR, RAYMOND A	5	R01 GM27115-03	29,789	0	12-82	MGN		21480
VOURNAKIS, JOHN N	1	R01 GM31114-01	70,191	2	06-83	MG		21320
VOUROS, PAUL	5	R01 AM GM22787-06	76,322	0	03-83	BMT		11940
WADE, MICHAEL J	2	R01 GM22523-07	63,478	2	08-83	GEN		21800
WADSWORTH, SAMUEL C	5	R01 GM26710-03	101,448	0	03-83	GEN		21600
WAECHTER, CHARLES J	5	R01 GM29833-08	122,784	3	05-83	PC		22410
WAHBA, ALBERT J	5	R01 GM25451-03	61,954	0	08-83	BIO		21320
WAHL, GEOFFREY M	5	R01 GM27754-03	122,167	0	03-83	MGN		21750
WAKIL, SALIH J	2	R01 GM19091-12	209,871	4	08-83	PC		22400
WALBA, DAVID M	1	R01 GM31051-01	58,131	2	07-83	MCHA		11910
WALBOT, VIRGINIA E	5	R01 GM29775-02	87,328	0	12-82	GEN		21280
WALCOTT, BENJAMIN	5	R01 GM28804-03	55,240	0	06-83	BPO		13700
WALDBILLIG, RONALD C	5	R01 GM26980-03	83,080	0	11-82	BBCB		22300
WALKER, GRAHAM C	5	R01 GM28988-02	97,492	3	03-83	MG		21250
WALLACE, BONNIE A	5	R01 GM27292-03	64,129	1	11-82	BBCA		22300
WALLACE, BRUCE	5	R01 GM29810-02	43,003	1	03-83	GEN		21700
WALLACE, DOUGLAS C	5	R01 GM24285-06	122,270	0	08-83	MGN		21280
WALLACE, R BRUCE	2	R01 GM31261-02	179,916	4	03-83	MGN		21750
WALSH, CHARLES J	5	R01 GM23516-06	80,657	0	08-83	MBY		22200
WALSH, CHRISTOPHER T	5	R01 GM20011-10	198,871	3	12-82	PC		22400
WALSH, CHRISTOPHER T	5	R01 GM21643-08	85,041	0	04-83	BIO		22400

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
WALSH, KENNETH A	5	P01 GM15731-14	374,481	0	11-82	SSS		22500
WALSH, KENNETH A	3	P01 GM15731-14S1	89,445	0	11-82	BIO	1	22500
WALTERS, MARTA S	5	R01 GM19272-08	48,989	0	09-82	CBY		22250
WAMPLER, JOHN E	5	R01 GM28209-03	66,738	0	06-83	BBCA		12930
WANG, HOWARD H	5	R01 GM28087-03	54,295	0	08-83	BBCB		13200
WANG, JAMES C	5	R01 GM24544-06	192,349	2	06-83	MG		21200
WANG, JOHN L	5	R01 GM27203-02	62,747	1	01-83	CP		22200
WANG, RICHARD J	5	R01 GM21305-08	87,167	0	05-83	MGN		21600
WANG, SHIH Y	5	R01 GM24238-05	74,787	2	03-83	BBCA		21250
WANNER, BARRY L	1	R01 GM29627-01	103,573	2	12-82	MG		21750
WARD, PETER A	5	R01 GM28499-02	102,363	3	12-82	SAT		13410
WARD, PETER A	1	R01 GM29507-01A1	137,819	4	06-83	SAT		13410
WARD, SAMUEL	2	R01 HL GM25243-05	95,468	4	08-83	CBY		22200
WARDEN, JOSEPH T	2	R01 HD GM26133-04	107,684	2	08-83	BBCA		22450
WARE, BENNIE R	5	R01 GM27633-04	95,005	1	08-83	BBCA		12990
WARNER, FRED D	5	R01 GM20690-09	100,177	2	05-83	CBY		22250
WARNER, JONATHAN R	5	R01 GM25532-05	248,324	3	07-83	GEN		21750
WARNER, ROBERT C	5	R01 GM28769-13	135,036	1	01-83	PC		21600
WARSHEL, ARIEH	5	R01 GM24492-05	54,356	0	12-82	BBCA		22600
WASKELL, LUCY A	5	R23 GM27791-03	36,417	0	08-83	SAT		13250
WASMUTH, JOHN J	2	R01 GM25339-04	83,203	2	11-82	MGN		21480
WASSERMAN, HARRY H	2	R01 GM13854-16	127,607	3	06-83	MCHA		11920
WASSERMAN, HARRY H	5	R01 GM07874-20	90,048	2	06-83	MCHA		11940
WATERMAN, MICHAEL R	5	R01 GM27151-03	20,950	0	03-83	BIO		11760
WATERSTON, ROBERT H	5	R01 GM23883-06	99,335	2	03-83	CTY		22250

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
WATSON, JACK T	5	R01 GM28921-03	55,238	0	07-83	SSS		11770
WATSON, JAMES D	1	R13 GM30536-01	5,000	0	03-83	MBY		21750
WATT, WARD B	5	R01 GM26758-02	90,502	1	11-82	GEN		21800
WATTERSON, DANIEL M	1	R01 GM30861-01	83,121	2	03-83	CP		22200
WATTERSON, DANIEL M	1	R01 GM30953-01	90,204	2	08-83	BIO		22400
WAUGH, JOHN S	5	R01 GM16552-14	158,175	0	03-83	BBCB		22500
WEAVER, ROBERT F	2	R01 GM22127-07A1	33,935	2	06-83	BIO	1	21750
WEAVER, STEVEN G	1	R01 GM30140-01	94,753	2	01-83	MGN		21800
WEBB, THOMAS E	5	R01 GM29221-10	86,488	1	03-83	BIO		21320
WEBER, GREGORIO	5	R01 GM11223-20	178,633	0	04-83	BBCA		22500
WEBER, HANS J	5	R01 GM28767-03	86,722	0	06-83	PB		22300
WEBER, STEPHEN G	5	R01 GM28112-03	52,650	0	06-83	SSS		12820
WEBER, WENDELL W	5	P01 GM27028-03	298,317	2	12-82	SRC		11700
WEBER, WENDELL W	3	P01 GM27028-03S1	9,839	2	12-82	SRC		11700
WEBSTER, DALE A	5	R01 GM27085-03	80,082	1	12-82	BIO		22450
WEBSTER, ROBERT E	5	R01 GM18305-11	97,816	0	12-82	MBC		22300
WECHSLER, JAMES A	5	R01 GM29535-02	123,103	1	12-82	MG		21200
WEDLER, FREDERICK C	5	R01 GM26582-05	79,321	0	08-83	BIO		22400
WEIGEL, PAUL H	1	R01 GM30218-01	79,089	2	01-83	CP		22300
WEIGEL, PAUL H	5	R01 GM26228-03	60,631	0	11-82	CBY		22200
WEIGERT, MARTIN G	2	R01 GM20964-09	224,196	4	12-82	ALY		21700
WEIL, PETER A	1	R01 GM31219-01	88,119	2	06-83	GEN		21310
WEINBERG, ERIC S	5	R01 GM27322-04	156,567	3	06-83	MBY		21750
WEINER, ALAN M	1	R01 GM31073-01	94,888	2	06-83	MBY		21310
WEINREB, STEVEN M	5	R01 GM28790-02	80,568	1	03-83	MCHA		11910

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG SUB	PROGRAM (FINE CODE)
WEINSHILBOUM, RICHARD M	5	R01 GM28157-03	95,530	2	06-83	PHRA	11780
WEINTRAUB, HAROLD M	5	R01 GM26176-04	57,092	1	04-83	MBY	21600
WEISS, RICHARD L	1	R01 GM31145-01	79,359	2	06-83	PB	22500
WEISS, RICHARD L	5	R01 GM28864-02	87,141	1	03-83	MBC	22450
WEISSMAN, IRVING L	2	R01 GM25902-04	118,696	2	07-83	MGN	21700
WEITH, HERBERT L, III	5	R01 GM29144-02	74,806	1	04-83	BIO	21100
WELLS, BARBARA D	1	R01 GM30700-01	94,611	2	04-83	BBCA	21320
WELLS, JACK N	2	R01 GM21220-06A1	94,052	4	03-83	PC	11870
WENKERT, ERNEST	5	R01 GM29232-03	140,454	1	08-83	MCHA	11910
WENSINK, PIETER C	5	R01 GM21626-08	107,037	0	11-82	GEN	21600
WESTERMAN, PHILIP W	5	R01 GM27127-03	58,012	0	12-82	BBCB	22300
WESTHEAD, EDWARD W, JR	5	R01 GM14945-16	87,906	0	05-83	BIO	22400
WESTHEIMER, FRANK H	5	R01 GM04712-25	73,508	0	11-83	PC	11920
WESTHEIMER, FRANK H	3	R01 GM04712-25S1	38,740	0	11-83	PC	11920
WETMUR, JAMES G	5	R01 GM22029-09	68,007	0	08-83	BBCA	21100
WHEELESS, LEON L, JR	5	P01 GM23088-05	362,392	3	12-82	SSS	12990
WHITE, EMIL H	2	R01 GM21450-07	112,958	2	11-82	BNP	22400
WHITE, KALPANA P	5	R01 GM28954-02	66,030	1	03-83	GEN	21700
WHITE, RAYMOND L	5	R01 GM29789-02	126,629	0	12-82	MGN	21480
WHITE, RONALD E	5	R01 GM28737-02	68,197	1	11-82	PB	11920
WHITE, STEPHEN H	2	R01 GM26346-04	237,694	2	03-83	BBCB	22550
WHITELEY, HELEN R	5	R01 GM20784-08	83,571	1	05-83	PC	21750
WHITELEY, HELEN R	2	R01 GM26100-04	51,206	3	11-82	MBC	21750
WHITELEY, JOHN M	2	R01 GM22125-07	125,665	4	03-83	PC	22400
WHITESELL, JAMES K	5	R01 GM29195-05	62,392	1	03-83	MCHA	11910

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
WHITESIDES, GEORGE M	1	R01 GM30367-01	218,501	3	03-83	BNP		11940
WIBERG, JOHN S	5	R01 GM21999-06	141,806	2	11-82	VR		21320
WICKNER, WILLIAM T	5	R01 GM23377-07	119,659	1	06-83	MBC		22300
WIDNELL, CHRISTOPHER C	5	R01 GM17724-12	139,416	3	06-83	MBY		22300
WILCOX, GARY L	1	R01 GM30491-01	83,098	2	04-83	MG		21750
WILCOX, GARY L	1	R01 GM30896-01	109,838	4	07-83	MG		21750
WILD, JAMES R	5	R01 GM29152-02	47,626	1	05-83	MG		21750
WILEY, ROBERT A	5	R01 GM26366-03	52,380	0	11-82	TOX		11890
WILHELM, JAMES M	5	R01 GM25168-05	112,836	3	03-83	GEN		21320
WILKINS, CHARLES L	1	R01 GM30604-01	356,883	2	05-83	SSS		12840
WILKINS, RALPH C	5	R01 GM28796-08	69,262	3	04-83	BMT		22450
WILKINSON, KEITH D	1	R01 GM30308-01	92,171	4	01-83	PC		22400
WILLIAMS, CHARLES H, JR	5	R01 GM21444-18	68,148	1	08-83	BIO		22400
WILLIAMS, CHARLES H, JR	5	P41 GM27558-03	14,225	0	12-82	SSS		12900
WILLIAMS, DONALD E	5	R01 GM16260-14	52,444	1	12-82	BBCA		22600
WILLIAMS, JOHN A	5	R01 GM19998-09	120,734	1	12-82	CP		22300
WILLIAMS, LUTHER S	2	R01 GM29200-02A1	123,719	4	03-83	BIO		21310
WILLIAMS, ROBLEY C, JR	5	R01 GM25638-05	114,149	3	06-83	BBCB		22250
WILLIAMS, ROBLEY C, JR	5	R01 GM29834-02	50,561	1	03-83	BBCB		22250
WILLIS, JOHN S	5	R01 GM11494-18	90,740	0	11-82	PHY		22300
WILMORE, DOUGLAS W	*5	P50 GM29327-02	401,799	3	08-83	SRC		13300
WILSON, ALLAN C	5	R01 GM21509-08	138,526	2	11-82	MGN		21800
WILSON, CAROL M	2	R01 GM26414-04	101,404	2	03-83	MGN		11780
WILSON, DAVID B	2	R01 GM25030-04	93,873	2	06-83	MBC		22300
WILSON, DAVID F	5	R01 GM21524-08	101,688	2	11-82	BIO		22450

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
WILSON, DAVID F	5	P01 GM12202-19	500,653	0	04-83	SSS		22450
WILSON, DWIGHT E, JR	1	R01 GM29702-01	9,600	0	12-82	BIO		22400
WILSON, G EDWIN, JR	7	R01 GM29240-01	52,858	0	08-83	BBCA		21320
WILSON, KENT R	5	R01 GM29750-02	59,176	1	06-83	BBCB		22600
WILSON, LON J	1	R01 GM28451-01A1	83,784	2	07-83	BMT		11920
WILSON, W DAVID	9	R01 GM30267-04	44,326	2	12-82	BBCA		11930
WIMMER, MARY J	2	R01 CA GM26334-04	72,831	2	07-83	PB		22450
WINCHURCH, RICHARD A	5	R01 GM26235-03	65,294	0	07-85	IMS		13410
WINEFORDNER, JAMES D	5	R01 GM11373-20	169,215	3	08-83	SSS		12840
WINGE, DENNIS R	1	R01 GM30482-01	119,466	2	04-83	BMT		22400
WINICOV, ILGA B	5	R01 GM27230-03	45,982	0	06-83	MBY		21320
WISE, DWAYNE A	5	R01 GM28660-02	39,547	1	11-82	CBY		22250
WISHNIA, ARNOLD	5	R01 GM27176-03	63,177	0	12-82	BBCA		21320
WISNIESKI, BERNADINE J	2	R01 GM22240-07	102,108	4	11-82	BBCB		22300
WITKOP, CARL J, JR	5	P01 GM22167-08	222,803	0	08-83	SSS		21400
WITMAN, GEORGE B, III	7	R01 GM30626-01	94,121	0	11-82	MBY		22250
WOLD, FINN	7	R01 GM31305-01	72,297	1	11-82	BIO		22500
WOLD, WILLIAM S	1	R01 GM31276-01	63,437	2	07-83	VR		21750
WOLF, GEORGE	5	R01 CA GM30777-02	71,729	1	04-83	BPO		13700
WOLF, RICHARD E, JR	5	R01 GM27113-02	88,802	1	03-83	MG		21750
WOLFE, BARRY B	1	R01 GM31155-01	92,216	2	07-83	PHRA		11770
WOLFENDEN, RICHARD V	5	R01 HL GM18325-12	112,911	2	06-83	BIO		22400
WOLOSEWICK, JOHN J	5	R01 GM28397-03	60,106	0	03-83	CBY		22250
WOLSTENHOLME, DAVID R	5	R01 GM26520-03	50,115	0	09-82	CTY		21280
WOLSTENHOLME, DAVID R	5	R01 GM18375-11	139,354	0	08-83	CTY		21200

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
WONG, KIN-PING	5	R01 GM22962-05	64,399	0	12-82	BBCA		21320
WONG, SHAN S	5	R01 GM26623-02	70,548	1	12-82	BIO		22400
WOOD, HARLAND G	5	R01 GM22579-08	187,541	2	08-83	BIO		22400
WOOD, HARLAND G	5	R01 GM24913-05	97,561	0	03-83	BIO		22400
WOOD, HARLAND G	5	R01 GM29569-02	59,676	3	06-83	MBC		22400
WOODARD, RONALD W	1	R01 GM30097-01	79,104	2	01-83	BIO		22400
WOODWARD, CLARE K	2	R01 GM26242-04	65,579	2	03-83	BBCA		22500
WOODY, ROBERT W	5	R01 GM22994-07	82,969	0	11-82	BBCA		22500
WOODY, ROBERT W	2	R01 GM23697-07	81,582	2	05-83	BBCA		21310
WOOL, IRA G	5	R01 GM21769-08	192,711	2	01-83	PC		21320
WOOLFORD, JOHN L, JR	5	R01 GM28301-03	94,705	0	07-83	GEN		21750
WORCEL, ABRAHAM	1	R01 GM30332-01	122,932	4	11-82	GEN		21600
WORCEL, ABRAHAM	5	R01 GM30339-02	96,418	0	11-82	CTY		21600
WRAY, GRANVILLE W	5	R01 GM26415-03	61,069	0	06-83	GEN		21600
WRIGHT, ANDREW	5	R01 GM15837-15	121,530	3	04-83	MBC		22300
WRIGHT, GEORGE E	5	R01 GM21747-08	118,251	1	12-82	BNP		21100
WRIGHT, THEODORE R	2	R01 GM19242-11	198,378	4	04-83	GEN		21700
WU, CHENG-WEN	5	R01 GM28069-03	161,482	2	12-82	BBCA		21750
WU, FELICIA Y	5	R01 GM28057-03	77,542	0	08-83	MBC		21750
WU, HENRY C	5	R01 GM28810-02	69,732	0	11-82	GEN		22300
WU, HENRY C	5	R01 GM28811-03	73,703	2	07-83	MBC		22300
WU, JOSEPH M	5	R01 GM27210-02	73,561	1	12-82	BIO		21320
WU, RAY	5	R01 GM27365-03	86,666	0	11-82	PC		21320
WU, RAY	5	R01 GM29179-02	108,289	3	03-83	GEN		21600
WULFF, DANIEL L	5	R01 GM28370-03	106,830	3	06-83	MG		21750

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
WUTS, PETER G	5	R01 GM28056-03	75,157	0	06-83	MCHA		11910
WYRWICZ, ALICE M	5	R01 GM29520-02	56,593	1	08-83	BBCB		13200
XAVIER, ANTONIO V	5	R01 GM25879-03	59,905	0	09-82	BMT		22450
YAFFE, DAVID	5	R01 GM22767-06	48,801	0	12-82	CTY		21700
YANG, JEN T	5	R01 GM10880-23	102,687	1	04-83	BBCA		22500
YANG, JOSEPH C	5	R01 GM26461-04	60,983	0	06-83	NEUA		13700
YANKWICH, PETER E	5	R01 GM18362-05	45,234	1	05-83	BBCA		11920
YANNAS, IOANNIS V	5	R01 GM23946-06	162,010	0	03-83	SAT		13420
YANOFSKY, CHARLES	5	R01 GM09738-20	150,304	1	04-83	MBC		21750
YARBROUGH, LYNWOOD R	5	R01 GM24599-05	66,841	1	04-83	BBCA		22250
YARDLEY, DARRELL G	5	R01 GM27915-03	47,570	0	03-83	GEN		21800
YARUS, MICHAEL J	1	R01 GM30881-01	210,890	4	06-83	PC		21320
YASUNOBU, KERRY T	5	R01 GM22556-07	97,676	1	06-83	PB		22450
YATES, FRANCIS E	5	P01 GM23732-06	582,118	1	04-83	SRC		12200
YATVIN, MILTON B	5	R01 GM26227-03	58,729	0	07-83	PHRA		11750
YEH, JAY Z	2	R01 GM24866-04A1	63,791	2	06-83	PHY		13200
YEH, YUN-CHI	5	R01 GM18012-08	60,401	0	03-83	MBC		21200
YOKOYAMA, SHOZO	5	R01 GM28672-02	40,719	1	12-82	MGN		21800
YOUNG, CHARLES S	9	R01 GM31452-04	104,493	2	04-83	VR		21200
YOUNG, ELTON T, II	2	R01 GM26079-04	152,990	4	11-82	GEN		21750
YOUNG, MICHAEL W	5	R01 GM25103-05	96,728	1	03-83	GEN		21600

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)
YOUNG, RYLAND F	5	R01 GM27099-03	60,540	0	12-82	EVR		21280
YU, CHANG-AN	7	R01 GM30721-01	116,022	0	02-83	BIO		22450
YU, NAI-TENG	2	R01 GM18894-12 AM	97,035	4	08-83	BBCB		22500
YUND, MARY A	5	R01 GM23349-06	87,875	0	03-83	GEN		22200
ZADUNAISKY, JOSE A	5	R01 GM25002-05	80,567	0	03-83	PHY		22300
ZAGZEBSKI, JAMES A	1	R01 GM30522-01	103,010	2	04-83	RNM		12910
ZAHLER, STANLEY A	5	R01 GM28038-02	50,105	0	11-82	MG		21780
ZAKIAN, VIRGINIA A	2	R01 GM26938-04	112,138	2	06-83	GEN		21200
ZAKIM, DAVID	1	R01 GM30840-01 ES	77,017	2	07-83	PHRA		11750
ZALKIN, HOWARD	2	R01 GM24658-12	137,158	4	06-83	MBC		22400
ZARE, RICHARD N	5	R01 GM29276-06	92,782	1	06-83	BMT		12840
ZIBOH, VINCENT A	5	R01 GM30410-02	68,195	0	07-83	HEM		11770
ZIEGLER, FREDERICK E	5	R01 GM29468-09	152,151	2	08-83	BNP		11910
ZIEVE, GARY W	1	R01 GM31005-01	89,563	2	08-83	CBY		22250
ZIFF, EDWARD B	5	R01 GM30760-02	123,893	3	08-83	VR		21750
ZIMM, BRUNO H	2	R01 GM11916-19	127,668	4	12-82	BBCA		21100
ZIMMERMAN, HOWARD E	5	R01 GM07487-22	123,113	1	07-83	MCHA		11930
ZIMMERMANN, ROBERT A	2	R01 GM22807-07	110,202	3	03-83	BBCA		21320
ZUBAY, GEOFFREY L	5	R01 GM29217-06	108,535	0	08-83	MBC		21780
ZUBIETA, JON A	1	R13 GM30753-01 GM	2,000	0	03-83	BMT		11920
ZUBIETA, JON A	5	R01 GM22566-07	49,177	0	06-83	BMT		11920
ZUSMAN, DAVID R	2	R01 GM20509-10	99,219	4	07-83	MG		22200
ZYSKIND, JUDITH W	5	R01 GM21978-06	69,446	0	09-82	MBY		21200

TABLE 2 RESEARCH GRANTS BY INVESTIGATOR

INVESTIGATOR	T	GRANT NUMBER	TOTAL DOLLARS	F-YRS	END DATE	IRG	SUB	PROGRAM (FINE CODE)

****	22	* CENTERS
****	2,857	NONCENTERS
****	2,879	TOTAL RECORDS

* U.S. GOVERNMENT PRINTING OFFICE: 1983-381-132:3099